1994

A study of employee theft in hospitals

Elena Castillo-Pekarcik

A STUDY OF EMPLOYEE THEFT IN HOSPITALS

A Thesis

Presented to the

Faculty of

California State University,

San Bernardino

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts

in

Criminal Justice

---

by

Elena Castillo-Pekarcik

March 1994

A STUDY OF EMPLOYEE THEFT IN HOSPITALS

A Thesis

Presented to the

Faculty of

California State University,

San Bernardino

by

Elena Castillo-Pekarcik

March 1994

Approved by:

[redacted]

Dr. Carl Wagoner, Chair, Criminal Justice Date 1/24/94

[redacted]

Dr. Frank Williams, Criminal Justice

[redacted]

Dr. Frances Coles, Criminal Justice

ABSTRACT

Castillo-Pekarcik, Elena, "A Study of Employee Theft In Hospitals," Master of Arts, California-State University, San Bernardino.

Purpose

The main purpose of this study was to establish whether there was a theft problem in the participating hospitals. Another purpose was to examine theft differences between male and female respondents and between hospitals.

Methods

The methodology used in this study was analysis of primary data gathered from a survey questionnaire. Questionnaires were distributed to 500 employees from two local hospitals. Out of 500 questionnaires mailed, 133 (27 percent) responded. The questionnaire consisted of 71 variables with three major divisions. To establish the respondent's perception of theft, a seriousness scale was created and entered at the beginning of the questionnaire. The second portion asks the respondent to record any observed theft behavior by other employees. The last section consists of the respondents own theft activity.

Analysis of the variables consists of frequency distributions, Chi-Square, cross-tabulations, and T-Tests. The variables are tested at the nominal, ordinal and interval levels of measurement.

Findings

This study showed that there was a theft problem in the two hospitals involving many hospital items all with different theft rates. Specifically, eight items had theft rates between 10-46 percent. This was discussed in the first hypothesis. There were ten hypothesis in all. Only one, the first hypothesis, was accepted.

Females committed more theft than males. Frequency scores indicated that the female theft rate was 23 percent higher than the male theft rate.

Generally, Kaiser Hospital had a higher theft frequency than San Bernardino Community Hospital (SBCH), 37 percent more. In the self-report section, Kaiser employees admitted to twice as much theft activity than SBCH employees.

For the most part, sex, age, income, marital status, occupation, years-of-service, ethic background, and education were not indicators of theft when introduced to the sample.

Conclusion

Based on the analysis of Hypothesis One, there is a substantial amount of theft occurring in the hospitals involving smaller hospitals items. The theft rates vary, from 1-46 percent. Theft of larger more valuable items were committed, but were less frequent. The statistics here may be an indication of what is actually

occurring but on a much wider perhaps more expensive scale. This research could not provide those conclusions due to its "smallness." A bigger hospital study focussing entirely on self-reporting theft consisting of a greater number of respondents could provide the statistics needed to substantiate the indicators of theft.

According to this research, control practices are needed to minimize theft losses. Cross-referencing and routine audits need to be instituted into department practice. Theft policies should be formally introduced to the employee at orientation and reiterated periodically throughout the year. And to prevent substantial losses, no one person should have full responsibility of a task. "Separation of duties" reduces the opportunity to commit theft.

ACKNOWLEDGEMENTS

Completion of this study was made possible by certain individuals. I owe thanks my thesis committee. Dr. Carl Wagoner, Chairman, provided me with guidance throughout the project and gave me helpful ideas in construction of this thesis. Dr. Frank Williams also provided me with consistent guidance throughout the writing of my thesis, particularly, in the methodology and analysis chapters. Dr. Frances Coles acted as my reader. Thank you for taking the time to read and make comments which aided in making my thesis that much better. No other set of individuals have given me the time, patience, and attention where it was so vitally needed as you three. Thank you also for your availability. When seeking assistance, these professors were available most any time. Their assistance I considered above and beyond the "call of duty." Thank you all for being members of my thesis committee.

Lastly, I owe thanks to my husband, Lawrence, for his support and encouragement. His constructive criticism regarding the thesis helped me a great deal. Thank you also for taking the time to proofread this 113 page thesis. I know the task was not easy.

Getting this project off the ground was possible by the two parcitipating hospitals in the study. However, first I would like to acknowledge the Cal-State Graduate

Office for providing financial assistance in the beginning of this study. The Graduate Office generously granted partial funding for this project. As for personnel assistance, I would like to thank Mr. Jim West and Mr. Rick Buckalew, from the Kaiser Permanente Walnut Regional Center, for providing regional statistic information. In Fontana Kaiser personnel, I owe thanks to Mr. Hardy Brown for providing the sample of employees for the survey. In particular, I would like to thank Mr. Bill Meyer, Fontana Kaiser Hospital Group Administrator, for allowing Fontana Kaiser Hospital Hospital to be part of the study. Also, thank you for your influence with personnel for cooperation and continued assistance throughout the project when obstacles arose. Without Mr. Meyer's consideration, this project may have been limited to one hospital.

I would also like to thank Ms. Linda Letson, Hospital Administrator, for having San Bernardino Community Hospital in the study. I would also like to thank Mr. Bill Moore in the personnel office for providing the other employee sample in the survey. I would especially like to acknowledge San Bernardino Community Hospital for offering to provide funding for their participation in the survey. Your financial assistance helped a great deal.

Lastly, I would like to thank Arthur Andersen &

Co. for the printing of the survey questionnaire free of cost. Without their generosity, this study may have been delayed due of limited funding. Your assistance was appreciated.

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER ONE

THE PROBLEM OF CRIME

Crime encompasses a variety of criminal activity ranging from blue and white-collar crime to violent criminal acts. This paper includes a discussion of the different types of crimes and thefts, and some consequences of both; however, it focuses specifically on employee theft in hospitals. The importance of this study lies in the fact that employee theft has become a critical problem and continues to grow.

The Literature

The United States has higher serious crime rates than any other developed country. Washington D.C., for example, has recently been named "homicide capital of the United States" because of their high murder rates. In 1988, Washington D.C.'s homicide rate was 59.5 per 100,000 population, whereas Toronto Canada had a homicide rate of 1.6 per 100,000 (Harries, 1990:4). New York City typically has more homicides in one year than the nation of Japan (Harries, 1990:100). Likewise, robbery rates in New York are five times greater than London's and 125 times higher

than Tokyo's (Archer and Gartner, 1984:38). Research by Currie (1991), states that the risk of homicide for a young American male, between the ages of fifteen to twenty-four is seventy-three times greater in the U.S. than in Austria and forty-four times greater than Japanese youth. For many of our larger cities, 1990 was the most violent year ever. By mid-year, cities with over a million population had homicide rates 20 percent higher than the entire year of 1989 (Currie, 1990). The risks of violence have simply risen too quickly in America. Worse, the number of those engaging in violence is growing.

As a nation, murder rose 4 percent in 1989 from the previous year (Crime in the United States, 1990). Rapes increased by 2 percent totaling 94,504. National trend studies show that by 1990 forcible rape rose 7 percent over 1985 and 14 percent above 1980. Robberies increased by 6 percent in 1989. Lastly, aggravated assaults increased by almost 5 percent in 1989 from the previous year.

Property crime has also increased. Motor vehicle theft increased 8 percent in 1989 from 1988 and 36 percent between 1985-1989 (Statistical Abstract, 1991). Larceny-theft incidents increased by only 1.2 percent in 1989 from 1988, but increased 9 percent between 1985-1989. Burglary, on the other hand, decreased by 2.5 percent in 1989 from 1988. Between 1980-1989, burglary decreased by

24 percent with its smallest decrease of .9 percent between 1985-1989. Nationwide there were 3,168,170 burglaries in 1989 (Crime In The United States, 1990). Although burglaries have recently decreased, 3,168,170 burglaries hardly seem like a small number. Basically, all property crime has increased except for burglary.

These rates are based on crimes reported to the police. However, according to the National Crime Survey, much crime goes unreported (Blumstein et al., 1991). Therefore, the problem of crime is significantly greater that official data indicates.

Looking at our corrections system, prisons are extremely overcrowded. Stricter laws and public pressure have forced judges to impose stronger sentences. As a result, the number of inmates is at a record high. In 1989, the prison and jail population passed the one million mark (Currie, 1991). Local jails are also filled to capacity. Prisons and local jails are simply overcrowded and we cannot build facilities fast enough to house these inmates.

The cost of crime is shocking. In 1971 the total expenses for criminal justice services was over $11 billion. By 1985, the cost of these services was over $45 billion (Sourcebook of Criminal Justice Statistics 1981 and 1986). As of 1990, the cost was $60 billion annually (Sourcebook Criminal Justice Statistics, 1990). This

figure does not include the costs to victims. "Out of pocket" costs of crime to victims was $10.9 billion in 1981 (Cohen, 1988). Costs to victims include monetary losses, pain and suffering either physical or mental, and risk of death. Even though personal and household crimes cost victims billions of dollars, this figure represents only a small fraction of the total cost of crime. Crime then, has no small price.

Generally, when people think of crime they think of the Uniform Crime Reports Part I offenses which include homicide, forcible rape, robbery, arson, aggravated assault, burglary, larceny-theft, and motor vehicle theft. They do not immediately think of fraud, embezzlement, bribery, or corporate violations as criminal. It is the media that emphasizes violent street crime and down-plays white collar crime. Nonviolent crimes simply do not generate attention by the media. Yet, compared to street crime, white-collar crime can be far more dangerous and more costly to society; danger is introduced through unsafe products or unsafe working conditions.

The concept of white-collar crime was first introduced by Edwin H. Sutherland in 1939. He defined white-collar crime as "a crime committed by a person of respectability and high social status in the course of his occupation," (Sutherland 1949:2). This definition encompasses everything from embezzlement to bribery of

government officials. Most of Sutherland's research was focused on business crime, particularly on violations of federal economic regulations. Before Sutherland's introduction of the concept of white-collar crime, crime was seen as something that happened primarily to immigrants, minorities, or poor people. After his classic study of criminal behavior by corporations, other criminologists and the public began to recognize offenses committed by the individuals who were usually law abiding, as criminal (Hollinger, 1983:1).

Social scientists, Marshall B. Clinard and Richard Quinney (1973) replaced the term white-collar crime with "corporate crime and occupational crime." Douglas and Johnson (1977) called white-collar crime "official deviance." Ermann and Lundman (1978) referred to it as "corporate and government" deviance. Finally, Simon and Eitzen (1982) used the term "elite deviance." Today, the label of white-collar crime is used for a wide variety of socially injurious behavior committed by individuals and corporations in the course of their occupations and organizational activity (Hollinger, 1983:1). White-collar crime is no longer restricted to "high social status" positions, it also includes middle levels of the status hierarchy. Green (1990) refers to occupational crime as "any act punishable by law which is committed through opportunity created in the course of an occupation

that is legal."

Corporate crime is viewed as a form of white-collar crime. Corporate violations differ from other forms of white-collar crimes because they are organizational rather than individualistic. The critical point here is that corporate officials are acting on behalf of the corporation and not specifically for personal gain, although the criminal act may bring executives benefits indirectly (Clinard and Quinney, 1973:188; Cullen et. al., 1987:40). Albanese (1987) considered planning and deceit as "organizational crime" which was not limited to occupationally related offenses. Donald Horning (1970), identified theft by workers of an industrial plant as "blue-collar crime." Both white and blue-collar crimes are perpetrated in the course of the job. With occupational crime though, the corporation is the victim. Some of the varieties of occupational crimes include embezzlement, employee pilferage, fraud, arson, vandalism, and shop lifting, among others.

The economic damage of white-collar crime is not easy to measure. During the 1970's, it was estimated corporate crime cost the public between $174-$231 billion a year (Hochstedler, 1984). The banking industry alone is guilty of costing the public billions of dollars (Cullen et. al., 1987). Jaspan (1974) reports U.S. corporations fail to report over $1 billion a year in income to the

Internal Revenue Service. In contrast, studies by Clinard and Yeager (1973) estimate that the annual losses from street crime are about $4 billion. This is less than 5 percent of the estimated losses from corporate crime. Compared to street crime, white-collar crime costs society considerably more.

Who is committing these crimes? Although violations occur in organizations ranging from meat packing plants to electrical companies, those with the highest crime rates are the petroleum, manufacturing, pharmaceutical, and automobile companies. More specifically, white-collar crime is committed by older adults instead of teenagers and young adults as in the case of street crime (Weisburd et al, 1990). According to this study, the average white-collar criminal is a white male with an average age of forty. Also, those individuals committing white-collar crimes are in the upper and middle hierarchy of the company. More white-collar crime is committed by males than females (Daly, 1989). This is understandable since there are more men in the work-force than women. The study by Daly (1989), indicated that men committing white-collar crimes were administrators or managers, and women committing white-collar crimes were in clerical positions. In the same study, men tended to commit these crimes in groups, whereas women tended to commit these crimes individually. Lastly, similar to street crime, a substantial

number of white-collar criminals are repeat offenders (Weisburd et al., 1990).

Most white-collar criminals do not receive severe penalties for their crimes; instead they receive relatively minor penalties or sanctions (Scott, 1989). Those committing large scale crimes often do not even suffer job loss; but for those committing small scale crimes, the job is the first to go (Benson, 1989). Class position at times determines the likelihood of loss job but it does not predict incarceration.

Fraud and Theft

Literature in criminology suggests there is an extensive amount of fraud and deception in retail businesses. False advertising is one of the best known forms of deception. A good example of fraud is the Equity Funding scandal where corporate executives fixed the books to inflate the stock to $80 when it was actually worth $6. An investigation revealed that company executives had written 56,000 phoney insurance policies and created $120 million in phoney assets. To collect on these insurance policies they "killed off" phoney insurees. After conviction, the president of the company received an eight year prison term. Severe sentences, however, are a rare occurrence.

Fraud is extensive in the automobile industry. According to a federal agency study, the average motorist

is over-charged about $150 a year for needless car repairs (Green, 1990:213). Collectively, the National Highway Traffic Safety Administration found that consumers waste almost $20 billion a year on fraudulent automobile repairs (Ashford, 1976). This type of fraud includes charging for extra hours of labor, installing new parts not needed, and charging for work that was never done.

The governmental sector is as vulnerable to fraud, pilferage and embezzlement as is the private sector. In fact, there are some crimes such as tax evasion that exclusively affect the government. Other areas of fraud involve welfare or medicare services. Bribery and corruption also exists in our government.

Corporate crime extends into the labor force. Deaths, injuries, and illnesses occur from unsafe working conditions through corporate violations. It is probably the most neglected enforcement area imposed on the American people (Cullen et al., 1987:67). The National Safety Council estimates 14,000 job-related deaths occur annually, while another 2.2 million disabling injuries occur annually (Ashford, 1976:114).

Consumers are also at risk from white-collar crime. Many products injure or kill thousands of consumers every year. Statistics show dangerous products result in approximately 28,000 deaths annually and 130,000 serious injuries (Claybrook, 1984). A good example is the Ford

Pinto which was knowingly manufactured with a faulty gas tank system. After a rear end collision, the Pinto at times would burst into flames from impact (Cullen et al., 1987:178).

As organizations victimize the public, members of the public victimize organizations. Victimization occurs through nonviolent crimes against businesses such as employee pilferage, embezzlement, securities theft\fraud, check fraud, credit card fraud, insurance fraud, vandalism, and burglary among others. These crimes combined are estimated to cost businesses billions of dollars annually. Tersine and Russell (1981), in their study, report that losses from internal theft ranges from $4 to $44 billion a year. More recent figures estimate white-collar crime closer to $47 billion a year (Sosnowski, 1985). Law enforcement officials claim that more than 90 percent of today's crime occurs inside businesses rather than on the streets. Further, the losses from economic crimes are forty times greater than the losses from street crime (May, 1980). Compared to street crime, nonviolent crimes against businesses cost $43 billion a year more.

Employee Theft

Hollinger, (1983) defines employee theft as the "unauthorized taking, control, or transfer of money and\or property of the formal work organizations that is perpetrated by an employee during the course of occupational

activity." Employee theft may take the form of taking money from a cash register, taking merchandise, supplies, or tools, manipulation of organizational assets and, more recently, computer theft for personal benefit.

Measuring this phenomenon accurately is difficult. Estimates on the economic impact of employee theft are at best educated guesses. Of the eleven crimes against businesses, theft of company property by employees is estimated by the American Management Associations to have the single most significant dollar-impact, (Hollinger, 1983). It is believed nearly a thousand businesses a year go bankrupt because of employee theft (MaCaghy, 1976). Research by Arnold (1985) indicates one out of ten businesses fail each year as a direct result of employee theft. Another report suggests 30 percent of all business failures in a given year may be attributed to significant employee-theft problems (Sosnowski, 1985; Hefter, 1986).

Employee theft is a growing problem in all organizations. Research by Gilmore (1982) states employee theft has grown from $16 billion in 1971 to $75 billion in 1979. Temporarily, large companies can absorb theft losses, but inevitably they must pass the cost to insurance companies, consumers, and the taxpayers. Many business failures; therefore, cannot be blamed on the economy as is often noted in the media, rather they are directly related to employee theft.

In 1976, it was estimated that 12 cents of every dollar spent was added to price because of employee theft, (Canadian Business, 1976). Undoubtedly, it is much higher today. According to Arnold (1985) businesses add a 15 to 25 percent "pilferage tax" to the price of goods. Here again, the consumer suffers the consequences.

The number of employees involved in employee theft varies. According to security expert Lipman (1973), approximately one-half of all employees steal to some degree; 25 percent of these employees take valuable items, and 8 percent of these employees steal large quantities of company property. Another study reports seven out of every ten employees can be expected to steal at one time or another (Tersine and Russell, 1981). A self-report study of a drug store chain indicated that 76 percent of the employees surveyed admitted to stealing (Alder, 1977). Similarly, another self-report study of an electronics assembly plant by Horning (1970) found that 85 percent of the employees surveyed admitted to stealing. In short, according to these studies, the majority of a companies' employees are involved in some type of theft.

Management personnel are not exempt from theft either. Studies by Jaspan (1974) indicate 62 percent of the losses from employee theft can be attributed to company supervisors. Since they have better access to cash or company books, theft by management personnel can

result in higher losses than theft by others. But this does not mean management steals more than regular employees; it only signifies that it is easier for them to commit theft. For example, in an extreme case, assets of a firm can be systematically drained off by directors eventually leaving the stockholders with nothing but a worthless shell as in the Equity Funding case. Non-management employees simply lack the access or power to commit such crimes.

Other studies estimate the prevalence of employee theft varies from 9 to 75 percent (Zeitlin, 1971; U.S. News & World Report, 1977). One of the principle reasons for so much diversity in these figures is due to little empirical data available from which researchers can accurately estimate the quantity of employee theft. Besides theft of company property, there is theft of the organization's time and benefits (Caudill, 1988). However, those issues will not be addressed here. Theft of time and benefits are topics within themselves.

Controlling crime against businesses is difficult for several reasons. First, private and public organizations are disliked by many people because of their large size, impersonality, and formal rules of regulation. Most crimes committed against businesses have low visibility. They are unobtrusive in nature. These factors have led to a failure of the public to stigmatize the perpetrators of

these crimes (Smigel and Ross, 1970:4). In fact, some criminal acts gain sympathy from the public. After apprehending a criminal, bureaucracies cannot routinely pass the offender to law enforcement agencies because they may not be seen as the victim (Smigel and Ross, 1970:5). Instead, organizations may receive bad publicity for prosecuting the perpetrator. To avoid becoming more of a victim, the company may decide not to prosecute and simultaneously maintain a positive public image. It is simply easier for a company to dismiss an employee rather than attract public attention through a formal legal prosecution which is costly and time consuming (Tersine and Russell, 1981). Companies, in addition, are open to libel suits for "defamation of character" if the offender is not convicted. For these reasons, few are prosecuted (Simgel and Ross, 1970:10; Tersine and Russell, 1981).

Hospital Theft

An extensive amount of data on employee theft exists on retail stores, industrial plants, and manufacturing companies. However, little data exist in the area of service organizations. Theft by hospital employees is a relatively new field. Hospitals are as vulnerable to employee theft as any other institution (Jaspan, 1974; Hofacre, 1979; Hollinger, 1979; Jones, 1980). Hofacre 1979) states that no organization is immune from employee theft. Schools and churches, along with hospitals, have

been the subjects of limited research on employee theft (Hofacre, 1979).

The extent of hospital theft is not known. Some experts attribute part of the high cost of hospital care to employee theft. This would stand to reason since hospitals, like other organizations, often increase prices to compensate for theft losses. As businesses, hospitals are likely to operate under the same principle. Because of the relative lack of research, the effects of employee theft are difficult to recognize in hospitals. Thus, more research is needed concerning the extent of employee theft, its causes, and effects. This thesis will focus on the former, the extent of employee theft.

Statement of the Problem

Theft, in general, is an extensive problem in law enforcement. Employee theft, in particular, is difficult to control and dollar losses run into the billions annually. It seems that no company is free from employee theft. It affects retail companies as well as service organizations. Methods of employee theft are both numerous and elaborate in scheme. To add to the problem, clerical billing errors and shoplifting inflate the rate of "inventory shrinkage" ((Hollinger, 1979). Whatever the label, pilferage, shrinkage, or stealing, employee theft remains the hidden crime of business. There is no easy answer to this phenomenon. This research, however, takes

another look at an area that has had little scrutiny in attempts to identify the extent of employee theft at a local level. In turn, perhaps the outcome of this research will yield new methods in controlling employee theft in hospitals and expose weaknesses of hospitals that may be contributing to the theft problem. This is the importance of this study.

There are ten hypotheses for this study which will be listed here.

Hypothesis 1: There will be a theft problem among the two hospitals of this study as in the other hospital studies mentioned (Jaspan 1974; Hofacre 1979; Hollinger 1979; Jones 1981).

Hypothesis 2: Male employees will have a higher rate of theft than female employees (Hollinger, 1979; 1983).

Hypothesis 3: Male employees will probably admit to theft of greater monetary value.

Hypothesis 4: Younger employees will have a higher frequency of theft than older employees (Hollinger, 1979; 1983).

Hypothesis 5: Marital status will have a direct effect on theft activity. Those employees who are not married will have higher theft activity that those who are married.

Hypothesis 6: Among the different ethnic groups, some groups will have a higher frequency of theft than others.

Hypothesis 7: Among the different occupations, some occupations will have am higher frequency of theft than others.

Hypothesis 8: Employees with more education will have lower frequencies of theft than those employees with less education.

Hypothesis 9: Employees with a higher income will have lower frequencies of theft than those with less income.

Hypothesis 10: Employees with fewer "years-of-service" or less tenure are more likely to engage in theft activity than those with more tenure (Hollinger, 1979, 1986).

Another focus of this study is to determine whether there is a significant difference in employee theft between hospitals. Variables such as age and ethnic background, as a contributing factor to employee theft, will also be examined. Another primary goal of this study is to determine the items most vulnerable to employee theft.

Limitations

There a few limitations to this study. First of all, the researcher did not determine the sampling unit. Each facility retrieved their own sampling unit. The

process of retrieving the sampling unit was administered by each hospital's personnel department. Both facilities used a computer assisted process. It selected the sampling unit from a stratified sample of the general employee pool.

Since the researcher was not involved in the sampling process, it is not known how representative the sample is. The list may not be as representative as it should be. With each facility retrieving their own sampling unit, the representativeness needed for a valid study could not be assured as would have been preferred. The presence of the researcher during the retrieving process was simply not possible. In reviewing Kaiser Hospital's sampling list, the sample appeared to be representative since it was in a stratified form. With San Bernardino Hospital's sampling list, the researcher was not permitted to view the list to protect the identity of the potential respondents. However, the researcher was assured by the personnel director that the list was a stratified sample from an alphabetized list.

Another limitation of the study concerns the number of hospitals participating. The study is limited to two hospitals instead of three as anticipated. With only two hospitals, the availability of the data is definitely limited. Out of the five hospitals who were asked to participate, only two welcomed the idea. Thus, the

results from this study may not be representative of all hospitals. Therefore, the results may not be accurately generalized to other hospitals. However, this study can confirm or contradict what has already been discovered. In addition, the study does create more data on a subject where little data exist. It is possible that new policies or procedures for reducing the extent of employee theft could be recommended.

CHAPTER 2

REVIEW OF THE LITERATURE

Introduction

This chapter traces the development of the hospital and identifies some of the contributing factors to employee theft in hospitals. It also discusses the concept of employee theft in an occupational setting, in this case, a hospital setting. Next, current research in this area is reviewed. It is important to pursue this study because according to Hofacre (1979), employee theft has social and psychological impact, corrodes societal values, leads to loss of faith in the law, and a lack of trust in organizations. If this is truly the case, then it is critical that further research ensues. In addition, to reduce the effects of employee theft, new control methods or policies must be developed. In analyzing the information in this current research, new methods may possibly be discovered and existing conditions within a hospital setting that may contribute to theft may be exposed.

History

Hospitals have been subject to various types of research, but little has focused on the extent and effects of theft or crime. Hospitals, as a setting where crime occurs, have not been studied from a social perspective (Hofacre, 1979). Thus, all of the effects of hospital theft are not known. Some claim that the high cost of hospitalization is due, in part, to hospital theft. But the effects of theft are only guesses. Accurate data on hospital theft by employees is simply not available. Some industries are required by law to document their losses; however, hospitals are not. To develop a better understanding of employee theft, clearly more data is needed in this area. One of the primary reasons for conducting this research is to make data more available.

The term hospital originated from the terms of "hospes" or "host." The origins of the Western hospital in the Middle Ages were primarily as charitable institutions. Anyone such as the poor, the sick, or the traveller, was able to seek care. During this time, the hospital was religiously based, both in practice and spirit. Those individuals who worked in the hospital saw taking care of the sick and weary as a righteous duty and a means of aiding one's own salvation.

Coe (1970:236), reports that hospitals contain two basic characteristics. First, there is an emphasis on

Christian charity. Under Christianity, the purpose of the institution was generally service and welfare. It meant that people employed there work together for the benefit of others. Second, Christian love meant providing care for anyone who needed it. The image is still of a "community" institution. Even today, most hospitals are organized on a charitable or nonprofit basis. The organization's primary goal is helping people.

After 1900, hospitals began to view themselves differently. They were not primarily a charitable institutions but as businesses. As a business it had to show, if not a profit, at least not a loss. In fact, hospitals are many businesses in one. Among other things, they are a laundry, restaurant, hotel, and office building. They use a great deal of drugs, foods, and equipment. Many hospital goods can be used by employees to furnish entire apartments or houses. Palmer (1971) states approximately 3,000 hospital items can be used in a home.

The reasons for the lack of data regarding hospital theft are not clear. Perhaps they are not studied as much because they are a service organization rather than a business one. Although they are not thought of in these terms, hospitals are "big business" (California Hospital Association, 1978). In 1977, the number of hospital employees totaled two and a half million. In 1988, the employee pool totaled almost four million (U.S.

Statistical Abstract, 1991). For the same year (1977), hospital expenditures reached $65.6 billion. This is 3.6 percent of the nation's gross national product (California Hospital Association, 1978). In 1988, total hospital expenditures were $196 billion annually (U.S. Statistical Abstract, 1991).

The cost of a hospital room has increased dramatically in the last 20 years. In 1970, the average charge in the U.S. for a semi-private room for one day was $81. In 1977 it reached $198. By 1988, the cost was $586 per day (U.S. Statistical Abstract, 1991). Undoubtedly, it is much higher today.

One reason why hospitals are "big business" is because they have experienced steady growth in the last generation. Between 1957-77, hospitals grew 11 percent nationwide (Hofacre 1979). In 1957, there were 5,309 hospitals in the United States. By 1977, there were 5,881. As of 1988, there were a total of 6,927 hospitals of all types operating in the nation (U.S. Statistical Abstract, 1991). Also, the average bed-size per hospital, in 1988, was approximately 200 (U.S. Statistical Abstract, 1991). In California, hospitals have grown at a phenomenal rate due to the rapid population growth, from 309 hospitals in 1955 to 527 in 1977 (California Hospital Association, 1978). By 1988, there were 563 hospitals operating in California. Hospitals truly are

"big business."

With their extensive growth, hospitals now have numerous specialized departments such as x-ray services, laboratories, physical therapy, nuclear medicine, cardiology and gastroenterology, along with diagnostic services. In addition to specialized departments, many hospitals have treatment centers for chemical dependency and social services for the handicapped and elderly (Hofacre, 1979). Having several different types of departments and services, some hospitals cover several city blocks.

When hospitals grow larger, add new services and make changes in old ones, there is an increased tendency toward bureaucratization, (Anderson and Warkov, 1961). At the same time, departments and personnel within them operate more independently of one another than they have in the past. This departmentalization and fragmentation decreases accountability, (Heydebrand, 1969). Both are contributing factors to a loss of organizational control over employee behavior, including theft.

Current Research

Some of the early research regarding hospital theft was done by Jaspan (1974). According to his research, hospitals are exposed to much of the same crime that occurs in other businesses. Hospitals are "prime" targets for theft since they contain enormous amounts of supplies,

drugs, cash, and portable equipment. In some respects, hospitals seem to be more vulnerable to theft than other businesses because they are "open" institutions. On any given day, hundreds of people enter and leave the facility. Visitors roam about freely into restricted areas without any surveillance. The possibility of theft is enhanced by free movement, lack of security, casually protected areas and the lack of preventative measures to minimize opportunity.

Jaspan (1974:172) found within a hospital setting "kickbacks," collusion, and hospital property stolen to be "fenced" somewhere else. In a medical center in the Midwest, the director of food services had been the beneficiary of favors and "kickbacks" from vendors for overlooking the padding of fees. His "kickbacks" had amounted to $25,000 annually. In another hospital, the maintenance supervisor overlooked heavily padded fees by heating, plumbing, and air-conditioning contractors to have his home painted at two-year intervals (Jaspan, 1974:173).

The pharmacy is a particularly vulnerable department. Control procedures are complicated by the free flow of sample merchandise and returned items. For example, an audit in one hospital revealed that the pharmacist and other employees were in collusion with several drug wholesalers. The pharmacist would buy excessive quantities of

drugs in exchange for expensive gift merchandise from the vendor. This was more or less a "barter" arrangement; money was rarely exchanged (Jaspan, 1974:174).

In another case, a pharmacist operated his own business on the hospital premises using hospital stock (Jaspan, 1974:174). Additionally, the pharmacist retained samples intended for doctors to distribute to his own private account.

It seems that most hospital departments are vunerable to theft, including the radiology department. In the radiology department of another hospital, x-ray technicians were stealing film and selling it on a regular basis to a private hospital (Jaspan, 1974:176).

Another susceptible department is central supply. Orderlies in one hospital went into business for themselves by hoarding surgical supplies in hampers and closets to later sale on the outside (Jaspan, 1974:177). After hours, ward personnel would remove the supplies from the premises.

An in depth study concerning hospital theft was done by Hofacre (1979). Her study consisted of an anonymous questionnaire which was sent to various hospital administrators. A total of 530 administrators were mailed a questionnaire about the hospital's victimization from theft. Out of 150 (28.3 percent) who responded to the survey, only 78 of those responded to the question of

the amount of theft loss for their hospital.

The results were as follows: 72 (48 percent) hospitals said that they had employee theft losses; 40 percent claimed $5,000 in theft losses; 6 (8 percent) hospitals suffered theft losses over $50,000; and one hospital claimed theft losses of $90,000 annually. Only 8 (11 percent) hospitals stated their theft losses were "minor." There were 15 (20.8 percent) hospitals that actually claimed no theft losses. The department for which the largest number of hospitals reported theft was Food Service, cited by 25 hospitals. Nursing (23 hospitals) and Housekeeping (22 hospitals) were not far behind. Admitting and Central Supply had the fewest losses (Hofacre, 1979).

A study by Morse and Morse (1974), two hospitals in the West reported the loss of 169,000 diapers, 26,000 sheets, 18,000 bedpans and 8,400 blankets over a 19 month period. After a period of time, this type of activity adds up to a substantial loss for the hospital.

According to a study of hospitals by Hollinger (1983) hospital "supplies" were the items most frequently reported stolen. Of those employees surveyed, 27 percent of the respondents reported involvement, 9 percent reported four or more occurrences over a year. In addition, almost 8 percent of them reported that they had stolen medication intended for patients, with 2 percent

noting that this had happened on four or more occasions in a year. Also, 5 percent indicated that they had taken tools or equipment from the hospital. A total of 4,111 hospital personnel from 21 hospitals completed the questionnaire.

This study was part of a larger study which included 16 retail merchandise corporations and 10 electronic manufacturing firms. However, since the total hospital sample size was not mentioned, it is not known what percentage 4,111 is of the total sample. Therefore, it is difficult to assess the impact of this information, although Hollinger did conclude that approximately 33 percent of the hospital employees were involved in at least some type of theft. Hospital employees who had direct contact with patients such as registered nurses, residents, physicians, therapists, or nursing assistants, when caring for patients on a day-to-day basis used hospital supplies for personal use more than other type of hospital personnel. In the health-care industry, most of the hospital property taken was by high-status employees, particularly the registered nursing staff. Males reported a higher theft rate than females. Younger employees were more likely to commit theft than older employees.

Continuing his research in 1988 with hospitals, Hollinger reports that the number of hospital employees involved in theft ranged from 17 to 41 percent. Although

these figures may be somewhat substantial, they are not as high as those in retail sector which ranged from 19 to 80 percent. Even though the sample size was smaller (N=3,567 retail employees; N=4,111 hospital employees) in the retail sector, they had a higher amount of theft activity.

In 1981, Jones conducted a hospital survey on a somewhat smaller scale. He surveyed thirty-four hospital nurses. The data from the study showed some interesting results. The results were as follows: 85 percent of the nurses admitted to theft, 68 percent admitted to stealing general supplies, 62 percent admitted to theft of medical supplies, and 74 percent admitted to theft of drugs. These figures suggest that employee theft among nursing personnel is widespread and needs to be reduced.

The U.S. Chamber of Commerce (1977) estimates the cost of crime in health care services where hospitals are predominant, are over one billion a year (cited by Hofacre, 1979). Another estimate places the "shrinkage" in hospitals at well over 100 million dollars a year, or $1,000 per bed per year (Morse and Morse, 1974). Another researcher estimates that one of every ten hospital employees steals habitually (Mclintock, 1970). Certainly with the activity of crime in hospitals, the high cost for hospital care must be considered. Employee theft seems to be a problem in hospitals as it is in any other organization.

Chapter 3

METHODOLOGY

Introduction

This chapter discusses the various aspects of the methodology used in this study. In this case, the methodology utilized was a self-report questionnaire regarding employee theft in two local hospitals. This chapter begins with a description of the setting. Then, an explanation of how the sampling frame was gathered follows. Next, the details of the survey process is discussed. This is followed by identification of the variables used in the questionnaire. Reliability and validity issues are also examined. Included in this chapter is a description of analytical tools used for the study and justifications for selecting the methodology. Lastly, the limitations of the study are discussed.

The purpose of this study is to examine the theft rate of each hospital along with the differences in the frequency scores of theft between men and women. Differences in theft rates involving other variables such as age and ethnic backgrounds will also be examined.

Setting Of The Study

The Kaiser Hospital examined in this study is located in Southern California in the business district of the city of Fontana. Recently, the city population has reached 90,000 residents. As of 1992, the hospital has reached an employee pool of approximately 3,500 employees of which 81 percent are women. The employee make-up consists of 59.3 percent Caucasians, 17.8 percent Hispanics, 13.1 percent Blacks, 9.2 percent Asians, and .2 percent American Indian. It has a total bed-size of 459. The hospital complex covers an entire block with others offices located in adjacent blocks throughout the city. Providing many of its own services, it is more or less a city within itself. Practically every kind of diagnostic service is contained within the Kaiser facility. In its current phase, the facility is undergoing extensive remodeling and construction of a five story office building and a parking structure.

Kaiser Hospital is also considered a private hospital open only to those who subscribe to it through their employers. Although most of its members are from organizations, private and public, it also has members who subscribe to the plan directly from the community under "open enrollment." Originally, it was designed to provide medical care only to those employees and their families working for the Kaiser Steel plant in Fontana. However,

in the 1950's, to initiate some revenue, Kaiser administration decided to open the membership to different organizations as well as the public based on a prepayment plan. Today, it serves an array of members from thousands of companies. Kaiser Hospital is considered a Health Maintenance Organization.

San Bernardino Community Hospital (SBCH) is also located in Southern California in the city of San Bernardino whose population is approximately 180,000 residents. Compared to Kaiser Hospital, SBCH is some somewhat smaller. It has an employee pool of about 1,200 employees, 77 percent of which are female. It has a total bed-size of 410. The ethnic make-up of the hospital employees is 58 percent Caucasian, 20 percent Black, 15 percent Hispanic, 7 percent Oriental and other nationalities such as American Indian. Currently, SBCH is also constructing a new building. After completing the present building, two more buildings are scheduled in the near future.

Since SBCH is surrounded by residential blocks in lieu of businesses, it seems to be less of a bureaucratic hospital. It has the atmosphere of the kind of hospital that is commonly found in a small rural town. There are no stockholders or partners. In fact, it is owned by the community rather than being owned by a private enterprise. It basically serves anyone in the community and individuals through various insurance plans. If by some

misfortune it were to go bankrupt, the assets would default to the state. One of the unique services it offers is an "Adult Day Care Center." This is similar to child day care centers only in this case it involves adults.

The Sample

It was the intention of the researcher to include at least three hospitals for a larger comparative analysis but due to a lack of willingness by several hospitals to participate, this study was limited to two hospitals. After approval from their hospital administrators, this survey consisted of two hospitals, Kaiser Permanente hospital and San Bernardino Community Hospital.

For both hospitals, the sampling frame included all employees which consisted of administrators, supervisors and regular staff employees. Retrieving the sample from the sampling frame was administered by each facilities' personnel department who used a computer assisted process. Each facility selected 250 employees for the sampling unit making the total of 500 employees for the unit of analysis. Since both employee lists were in alphabetized order, the sampling process was a stratified sample. A stratified sample was the optimal method for this list because it created a better representative sample than any other type of selection process. It enabled the sample to represent all nationalities, ages, incomes, and professions.

Out of 500 employees sampled, 133 (28 percent) responded. The respondents consist of 84 percent women and 16 percent men with a mean age of 41. The ethnic make-up includes 68 percent Caucasian, 10 percent Black, 9 percent Hispanic and Asian, and four did not respond to the question. Most (70 percent) of the respondents are married, 28 percent are either single, divorced or widowed, and three did not respond. Regarding occupation, 65 percent of the employees consider themselves professionals. The rest are 16 percent clerical and the remaining 19 percent consist of technical staff. With education variable, 10 percent graduated from high school, 22 percent had some college, 29 percent had AA\AS degrees, and 27 percent had BA\BS degrees. Up to 10 percent of the respondents had a Masters Degree. The remaining either did not respond or did not finish high school. Lastly, the mean income was $57,000 with an mean of ten "years of service."

For confidentiality purposes of the employee's name and address, the administrators of SBCH did not release the sampling list to the researcher. Kaiser Hospital Administration did release their sampling list to the researcher. Also for confidentiality purposes, the list remained strictly in possession of the researcher during the data collection.

Although the researcher was not present when the

sampling list was retrieved, there is little doubt, if any, that a representative sample was not achieved. Each hospital considered the project serious. Moreover, both hospitals were interested in their theft rate and wanted accurate results. Additionally, the researcher was advised by both administrations that their staff attempted to retain a representative sample. Using a stratified sample, this was assured.

The Survey Instrument

The survey instrument for this study is a self-administered, anonymous questionnaire. It consists of 71 items (See Appendix). The first page of the questionnaire contains a cover letter explaining the purpose, intentions, and sponsor of the study. It also states that participation in the study is voluntary and assures anonymity. It is divided into three major divisions with one subdivision within Section Two.

The first nineteen questions at the beginning of the questionnaire are to establish the respondent's perception of what he or she considers to be serious or nonserious theft. In this section, the respondent is asked to rate the seriousness of many different types of hospital property, from cleaning supplies to hospital equipment. For example, the respondent is asked to rate the seriousness of "taking hospital linen, blankets or towels."

The next set of questions (20-42) asks information about employee theft by other employees in other departments, as well as the respondent's own department. Using the same property items as in the Seriousness Scale, the respondent is instructed to check either "yes" or "no" if she or he is aware of that particular theft activity. If the respondent is aware of theft activity in either department, the respondent is asked to indicate whether it has been in the last week, month, 6-months, or year. Asking about more than one department, created a subsection for this portion of the questionnaire.

In Section Three (questions 43-59), the respondent is asked to indicate his or her own participation in theft behavior of hospital property using the same questions and format as in Section Two. The same frequencies are also used. Questions 60-63 asked about the "easiness" of theft and hospital security.

The last set of questions (64-71) request basic information regarding the respondent's demographics such as sex, birth-date, marital status, occupation, ethnic back-ground, years of service, income, and education. These questions are solely for the purpose of establishing the "make-up" of the sample as a whole. In summary, except for a couple of demographic questions, all of the questions are closed-ended.

The Survey Process

Each respondent was mailed a questionnaire, with a prepaid return envelope, to his or her home address. All questionnaires were metered and mailed first class. Kaiser Hospital employees were mailed their questionnaires on Sunday March 8, 1992. Since the researcher did not have the San Bernardino employee list, the questionnaires were delivered to the personnel office on Tuesday March 10th and were mailed approximately March 12th by the personnel staff. Coding identifications numbers into the booklets could not be done because the survey was strictly anonymous. To distinguish between hospital questionnaires, the Kaiser Hospital instrument had a blue cover and SBCH had a gray cover.

After one week, forty-three questionnaires had been returned to the Department of Criminal Justice at Cal-State, San Bernardino. By mailing them to the department neither employer would have access to the data. After the second week, an additional thirty-seven questionnaires had been received. Approximately two weeks later, a follow-up reminder postcard was sent to each respondent. With Kaiser Hospital, the postcards were directly mailed to all respondents. With SBCH, the postcards were delivered on March 16th and mailed out approximately March 24th by the personnel staff as with the questionnaires. The postcard assured the respondent of anonymity and stressed the

importance of the respondents participation in the study.

After mailing the reminder postcard, another thirty-six questionnaires in the third week were returned. In the fourth week ten more questionnaires arrived. Between the fifth week (April 5th) and the eighth week (April 26th), just a handful of questionnaires were received. May 8, 1992 was set as the deadline for returning the questionnaires. After eight weeks, the total number of returned questionnaires was 133, 72 for Kaiser Hospital and 61 for SBCH. This is a return rate of 27 percent. There were eighteen "dead letters" returned due to wrong addresses with one "deceased" employee. Mailing another questionnaire along with the reminder postcard might have increased the response rate but was impossible due to limited funding.

Variables

The items listed below are the variables used for analysis of the primary data gathered from the two local hospitals. The final unit of analysis consisted of 133 respondents. In this study, the gender variable along with others will be examined in relation to the frequency scores. The following paragraphs contain a description of the variables and how they are coded.

DEPENDENT VARIABLES

Seriousness Scale. The Seriousness Scale is used for the first nineteen questions which established the

respondent's perception of theft by listing theft of different hospital items. The scale is coded in ascending order of seriousness, from 0-10 with zero being the least serious and ten being the most serious. Each offense is ranked according to the Seriousness Scale.

Offenses. A variety of hospital property items are listed as offenses in Sections One and Two. The respondent is simply asked to reply either yes coded 1 or no coded 0 for knowledge of the offense.

Frequency of Offenses. The frequencies are coded 1 for week, 2 for month, 3 for six months, and 4 for a year.

Employee Theft. Using the same offenses and response patterns, questions in the third section pertained to the respondent's own involvement in theft behavior of hospital property. Thus, employee theft is measured by the admission and self-report frequency of the employee's participation in theft of hospital property.

INDEPENDENT VARIABLES

Sex. Gender of the employee is coded 1 for male, 2 for female.

Marital Status. To identify marital status, married is coded 1, single is coded 2, divorced is coded 3, separated is coded 4, and code 5 is an "other" category.

Age. Age is identified by requesting "year of birth." The year of birth was then entered into the computer files.

Race. Ethnic backgrounds are coded 1 for Caucasian, 2 for Black, 3 for Hispanic, 4 for Asian, and 5 for all other categories.

Occupation. Occupational status includes 6 categories: 1 for maintenance, 2 for clerical, 3 for technical, 4 for clerk, 5 for professional, and 6 for any other occupation.

Years of Service. The respondent is simply asked to indicate "years of service" on the space provided. The total of years for each respondent was then entered into the data files.

Education. To identify educational levels, six categories are offered. Beginning with high school education, 1 is coded for some high school, 2 for a high school education, 3 for some college, 4 for an AS\AA degree, 5 for an BA\BS degree, and 6 for a Masters Degree or higher.

Income. The respondent is asked to indicate their total family income in the space provided which was also entered into the data files.

Levels of Measurement

Race, sex, marital status, occupation and the offenses are nominal levels of measurement. Education and frequency of offenses are ordinal levels of measurement. Interval levels of measurement include the Seriousness Scale, age, income and "years of service."

Hypotheses

The purpose of this study is not only to determine whether there is a theft problem in the hospitals, but also to identify those variables that may be contributing to the theft problem. It is also concerned with examining the differences between the hospitals and the differences between female and male scores. The hypotheses are as follows:

Hypothesis 1: There will be a theft problem among the two hospitals of this study as in the other hospital studies mentioned.

Hypothesis 2: Male employees will have a higher rate of theft than female employees.

Hypothesis 3: Male employees will admit to theft of greater monetary value.

Hypothesis 4: Younger employees will have a higher frequency of theft than older employees.

Hypothesis 5: Marital status will have a direct effect on theft activity. Those employees who are not married will have higher theft activity than those who are married.

Hypothesis 6: Among the different ethnic groups, some groups will have a higher frequency of theft than others.

Hypothesis 7: Among the different occupations, some occupations will have a higher frequency of theft than others.

Hypothesis 8: Employees with more education will have lower frequencies of theft than those employees with less education.

Hypothesis 9: Employees with a higher income will have lower frequencies of theft than those with less income.

Hypothesis 10: Employees with fewer "years-of-service" or less tenure are more likely to engage in theft behavior than those with more tenure.

These hypotheses are based on the review of the literature. Theft by hospital employees was found in studies by Jaspan (1974), Morse and Morse (1974), Hofacre (1979), Jones (1981), and Hollinger (1979;1983;1986). Jaspan's (1974) study not only disclosed theft of hospital property but also "kickbacks," and collusion was committed by professional personnel. A study by Hofacre (1979) revealed male employees committed theft of greater monetary than their female counterparts. Jones (1981) also found professional staff, mainly nursing, committed theft of general and medical supplies. Hollinger's 1983 study indicated younger employees committed twice as much theft than older employees and theft committed by male employees was three times higher than females employees.

Hollinger's 1986 study showed theft activity was higher in those employees with less tenure than those with more years-of-service. The rational was that these employees have less to lose in benefits if they are apprehended.

Reliability and Validity

Historically, surveys used in studies have proven to be an effective method of measuring attitudes providing that the instrument is properly constructed. To promote a good response rate, questions in the survey should be clear, objective and unbiased and there should be no leading questions. In the same respect, for closed ended questions, the answers given should be mutually exclusive and exhaustive. It was with these concepts in mind that the questionnaire was constructed.

Reliability was accomplished in several ways. Two hospitals were used instead of one, although five to six hospitals would have been preferred for repeat application of the test instrument. For external consistency, the same questionnaire was used in both hospitals. To provide equivalent conditions, each respondent was mailed a questionnaire simultaneously to his or her home. This provided privacy and convenience for the respondent.

For internal consistency, the questionnaire contains repeat questions in Sections One, Two and Three. In other words, the same set of questions are asked in each section only they are asked under a different set of circumstances

for reliability.

In measuring the concept of theft, the researcher used a Seriousness Scale which has been proven to be effective in measuring other concepts. In this case, the questionnaire is measuring the perception of theft. To provide a finer grade of measurement, instead of using a Likert Scale of 0-5, the researcher used a 0-10 scale for the first portion of the instrument. Using a 0-10 scale captures the true meaning of the concept in lieu of using a scale with fewer points. It also helps to identify the true differences among the respondent's in the perception of theft. To make the scale more accurate, serious and nonserious items are used involving theft behavior. To promote reliability in measuring the concept, nineteen questions are asked about theft of hospital property in lieu of ten as originally designed. Above all, the content of this section, along with the rest of the sections, consists of information that the respondent is likely to know and be relevant to the respondent.

Validity was established in several ways. The hospitals in the study are of similar function and characteristics. In fact, for similarity purposes, the hospitals almost have the same employee "make-up" which is mostly women and minorities. Although the hospitals differ in size (1,200 employees for SBCH versus 3,500 for Kaiser Hospital), they are the same type of hospital.

Both are hospitals whose primary purpose is to provide medical care on an in or out patient basis.

To enhance validity in the representativeness among the respondents, a stratified process was used in retrieving the sample. Selecting the sample by alphabetical order included the entire employee pool, as opposed to selecting the sample by occupation which would not have been representative.

Since this survey was limited to two hospitals, the quantity of those surveyed was increased for representativeness. A total of 500 employees were surveyed when only 100 from each hospital would have been sufficient. Out of 500 employees surveyed, 133 (27 percent) responded. In a survey, 27 percent is considered low. However, considering the sensitive topic, a 27 percent return rate is not unusual, rather normal.

Lastly, to ensure validity in the concept being measured, the questionnaire includes theft items from as many departments as were possible without making the questionnaire too lengthy. Questions involving many different types of hospital property are also included and range in valve from extremely valuable to inexpensive.

Analytical Tools

The analysis involves several tests. For the level of significance, Chi-square and the T-Test is used. Chi-Square is used for cross-tabulations of nominal and

ordinal data. The T-Test is used to compare two-group variables with interval data. Correlation analysis is used to indicate the relationship between the variables of nominal data. Lastly, Pearson's r is used to measure the relationship of two interval-level variables.

Justification

Since there is little empirical data on this topic, primary data seemed the best choice. Thus, a survey instrument was constructed to gather primary data from two hospitals. Ideally, more hospitals should have been used, but more were not possible for this study.

Other research methods are analyzing secondary data or field research such as interviewing. Interviewing would have been very time consuming, aside from the fact that it would have not promoted a good response rate because of the sensitivity of the issue. Although running a survey was costly, it was not time-consuming nor was it as costly as other research methods. One of the primary purposes in using a questionnaire survey is to obtain primary data. Using secondary data, this would not have been possible. Because of the sensitive subject matter of theft, a survey instrument generates a better response rate than an interview. It allowed for privacy which was needed for this type of research. Further, a survey instrument is best to use for a better response rate in self-reporting sections of criminal activity.

Also, a survey instrument assures anonymity and confidentiality which was advocated in the cover letter. Surveys usually do not have a high response rate. Without using these necessary precautions, the response rate would have been even lower. More importantly, the success of this project would have been limited. Above all, with possible identification a respondent would be reluctant to submit his or her answers. Observational studies could be used as a research method. One could not observe employee theft. For this project, it did not seem practical. Experimental research is another type of design. For obvious reasons, it was not applicable here. In summary, for this sensitive topic, a questionnaire instrument was the optimal instrument. It was designed to provide maximum confidentiality and thus provide maximum results.

Limitations

One limitation of this study is the number of hospitals participating. Two hospitals does not make for a good comparative analysis. Five hospitals would have been preferred but was impossible due to the lack of participation by other hospitals. Another limitation is the survey instrument. Surveys have historically yielded a low response rate when used in a single-contact design. But due to the subject matter, a survey was best for this project. Since the researcher did not participate in the selection of the unit of analysis, there is a possibility

that the sample may not be representative of the population. Therefore, the results may not be generalized. A pretest at the beginning of the project could have exposed of some technical problems within the survey, but was not possible due to limited funding. Mailing a second booklet to the respondent with the reminder postcard might have increased the response rate, but was also not sent because of limited funding.

CHAPTER 4

ANALYSIS OF DATA

Introduction

The general purpose of this study is to determine whether there is an employee theft problem at Kaiser Hospital and San Bernardino Community Hospital. In addition to identifying a theft problem, the purpose of this study is to identify those variables that may contribute to theft activity. The data was offered from 133 participants who responded to a survey distributed to 500 employees from the two local hospitals. Hence, the results of this study are gathered from primary data.

To analyze the findings of those who responded, I will begin by discussing the dependent variables and then the independent variables. Next, I will examine the variables in relation to the hypotheses. In order to obtain a general idea of the sample, the discussion begins with a univariate analysis otherwise known as a frequency distribution. Consequently, a bivariate analysis follows as they apply or not to the hypotheses mentioned.

Dependent Variables

Seriousness Scale

The Seriousness Scale is one of the dependent variables used to establish the respondent's perception of theft. Respondents rated a series of theft behaviors according to a scale coded 0-10, with zero being the least serious and ten the most serious. There are nineteen variables associated with the Seriousness Scale.

Out of the nineteen variables, fifteen are considered serious theft behavior, receiving a rating between 6-10. Specifically, nine of the nineteen items received a seriousness score of ten by most of the respondents. Those receiving a rating of 6-10 are the more valuable hospital property items and those receiving a lower rating are the less valuable items. Regarding the scale, the average of the nineteen means, standard deviations, and medians is 7.78, 2.78, and 8.42 (See Table 1).

Offense Information

The second dependent variable is the offense information involving questions 20-39 (Section 2) and 43-59 (Section 3). Since questions 43-59 contain the self-reporting information and are probably the most conclusive, they will be discussed first. In this section, the respondents were asked to indicate their participation in theft of certain items and also the frequency of it.

Table 1

Means and Standard Deviations Of Variables

For Seriousness Scale

Variable	N	X	SD
V1 Linen\Blankets	132	7.87	2.45
V2 Typewriters	132	9.27	1.94
V3 TV's	132	9.33	2.02
V4 Uniforms\Gowns	131	7.47	2.67
V5 Small Equipment	131	8.96	1.98
V6 Surgical Instruments	131	9.11	1.99
V7 Computers	131	9.42	1.98
V8 Tools	131	8.90	2.07
V9 Lotion	130	5.53	3.45
V10 Large equipment	131	9.51	1.82
V11 Medical Aid Supplies	130	5.89	3.50
V12 Paper	131	6.63	3.26
V13 Paintings	131	9.04	2.18
V14 Clerical Supplies	131	5.30	3.50
V15 Office Supplies	131	6.81	2.99
V16 Office Furniture	131	9.19	2.12
V17 Kleenex	131	4.56	3.64
V18 Janitorial Supplies	131	7.06	2.87
V19 Patient Care Supplies	130	7.98	2.53

Generally, this section exposes the theft activity admitted by the respondent. As a whole, the majority of the respondents reported no involvement in theft behavior while a small percent admitted to theft in some items. There were seven variables of the seventeen with "no theft activity." Those who admitted to theft, admitted to theft of "smaller offenses." Depending on the hospital item, theft admissions ranged from 2-36 percent. With the smaller hospital property items, the most frequent occurrence was "6-months." With the larger or more valuable property, the most frequent occurrence was "yearly." The average of the seventeen medians is 1.76. (See Table 2 and 3)

Table 2

Self-Report Of Theft By Respondents

Theft	Item	(N)	NO	%	YES	%
V43A	Linen\Blankets	133	125	94.0	8	6.0
V44A	Typewriters	133	133	100.0	0	0
V45A	TV's	133	133	100.0	0	0
V46A	Uniforms\Gowns	133	117	88.0	16	12.0
V47A	Small Equipment	133	131	98.5	2	1.5
V48A	Surgical Instruments	133	131	98.5	2	1.5
V49A	Computers	133	133	100.0	0	0
V50A	Tools	133	133	100.0	0	0
V51A	Lotion	133	105	78.9	28	21.1
V52A	Large Equipment	133	133	100.0	0	0
V53A	Medical Aid Supplies	131	83	62.4	48	36.1
V54A	Office Supplies	133	131	98.5	2	1.5
V55A	Office Furniture	133	133	100.0	0	0
V56A	Kleenex Boxes	131	96	72.2	35	26.3
V57A	Janitorial Supplies	133	131	98.5	2	1.5
V58A	Patient Care Supplies	133	130	97.7	3	2.3
V59A	Personal Belongings	133	133	100.0	0	0
Total Yes Responses					146	

Table 3

Self-Report Theft Frequency Responses

Theft Item		Cumulative Frequency	Mode
V43A1	Linen	7	4
V44A1	Typewriters	0	0
V45A1	TV's	0	0
V46A1	Uniforms\Gowns	15	4
V47A1	Small Equipment	2	1,4
V48A1	Surgical Instruments	2	4
V49A1	Computers	0	0
V50A1	Tools	0	0
V51A1	Lotion	28	3
V52A1	Large Equipment	0	0
V53A1	Medical Aid Supplies	50	3
V54A1	Office Supplies	2	3,4
V55A1	Office Furniture	0	0
V56A1	Kleenex Boxes	37	3
V57A1	Janitorial Supplies	2	2,3
V58A1	Patient Care Supplies	3	3
V59A1	Personal Belongings	0	0
		146*	

*Total frequencies for admissions of theft

The other dependent variable is the offense information involving questions 20-39. Using the same question and answer format as in Section Three, respon- dents recorded theft offenses committed by other employees in other departments and in their own. Frequencies included in the last week, month, 6-months, or year. Since these questions asked about two departments within the same question, there are a total of forty variables.

For this "other department" category, most of the respondents did not observe or have knowledge of theft activity for all offenses. However, according to the "yes" responses, theft activity observed ranged from 12-31 percent, depending on the hospital item. Every item had theft activity present. The most frequent occurrence was "6-months." (See Table 4 & 5)

Table 4

Responses For Theft Activity In "Other" Departments

Variable	N	NO	%	Yes	%
V20A Linen\Blankets	132	113	85.6	19	14.4
V21A Typewriters	133	129	97.0	4	3.0
V22A TV's	133	127	95.5	6	4.5
V23A Uniforms\Gowns	133	98	73.7	35	26.3
V24A Small Equipment	133	124	93.2	9	6.8
V25A Surgical Instruments	133	125	94.0	8	6.0
V26A Computers	133	131	98.5	2	1.5
V27A Tools	133	130	97.7	3	2.4
V28A Lotion	128	90	67.7	38	28.6
V29A Large Equipment	130	128	96.2	2	1.5
V30A Medical Aid Supplies	129	92	69.2	37	27.8
V31A Paper	131	120	90.2	11	8.3
V32A Paintings	131	130	97.7	1	.8
V33A Clerical Supplies	127	86	64.7	41	30.8
V34A Office Supplies	133	123	92.5	10	7.5
V35A Office Furniture	133	132	99.2	1	.8
V36A Kleenex	129	93	69.9	36	27.1
V37A Janitorial Supplies	133	125	94.0	8	6.0
V38A Patient Care Supplies	131	122	91.7	9	6.8
V39A Personal Belongings	132	102	76.7	30	22.6

*Total yes responses for admissions of theft 310

Table 5

Frequency Responses For V20A-39A

Variable	Observations	Mode*
V20A1 Linen\Blankets	20	3
V21A1 Typewriters	4	3
V22A1 TV's	6	4
V23A1 Uniforms\Gowns	45	3
V24A1 Small Equipment	9	3
V25A1 Surgical Instruments	7	3
V26A1 Computers	2	3,4
V27A1 Tools	3	1,2,3
V28A1 Lotion	39	3
V29A1 Large Equipment	2	3
V30A1 Medical Aid Supplies	36	1
V31A1 Xerox Paper	11	1
V32A1 Paintings	1	3
V33A1 Clerical Supplies	41	1
V34A1 Office Supplies	10	4
V35A1 Office Furniture	1	4
V36A1 Kleenex	36	1
V37A1 Janitorial Supplies	8	1
V38A1 Patient Care Supplies	9	3
V39A1 Personal Belongings	29	3
Total	322	

*Codes 1) weekly 2) monthly 3) 6-months 4) yearly

For the respondent's own department, there were only three items with no theft activity present. Depending on the type of hospital property, the observed theft was between 1-46 percent. The most frequent occurrence of theft was "weekly" and "yearly" (See Tables 6 & 7). With the smaller or less valuable hospital items, the most frequent occurrence was "weekly." With the larger or more valuable items, the most frequent "yearly." The median is 6-months. (Offenses and frequencies will be discussed in greater detail later in this chapter as they relate to the hypotheses.)

Table 6

Responses For Theft Activity In Respondents "Own" Department

Variable	N	NO	%	YES	%
V20B Linen\Blankets	131	118	88.7	13	9.8
V21B Typewriters	127	126	94.7	1	.8
V22B TV's	128	126	94.7	2	1.5
V23B Uniforms\Gowns	130	100	75.2	30	22.6
V24B Small Equipment	128	123	92.5	5	3.8
V25B Surgical Instruments	129	123	92.5	6	4.5
V26B Computers	129	129	97.0	0	0
V27B Tools	128	128	96.7	0	0
V28B Lotion	128	85	63.9	43	32.3
V29B Large Equipment	126	126	94.7	0	0
V30B Medical Aid Supplies	127	68	51.1	59	44.4
V31B Paper	127	114	85.7	13	9.8
V32B Paintings	128	126	94.7	2	1.5
V33B Clerical Supplies	127	66	49.6	61	45.9
V34B Office Supplies	133	123	92.5	10	7.5
V35B Office Furniture	133	132	99.2	1	.8
V36B Kleenex	128	76	57.1	52	40.6
V37B Janitorial Supplies	129	121	91.0	8	6.0
V38B Patient Care Supplies	127	118	88.7	9	6.8
V39B Personal Belongings	129	112	84.2	16	12.0
*Total yes responses for admissions of theft				331	

Table 7

Frequency Responses For V20B-V39B

Variable	Observations	Mode*
V20B1 Linen\Blankets	12	4
V21B1 Typewriters	1	4
V22B1 TV's	1	4
V23B1 Uniforms\Gowns	30	3
V24B1 Small Equipment	4	3
V25B1 Surgical Instruments	6	3,4
V26B1 Computers	0	0
V27B1 Tools	0	0
V28B1 Lotion	43	1
V29B1 Large Equipment	0	0
V30B1 Medical Aide Supplies	57	1
V31B1 Paper	13	1
V32B1 Paintings	2	1,4
V33B1 Clerical Supplies	61	1
V34B1 Office Supplies	10	3,4
V35B1 Office Furniture	1	4
V36B1 Kleenex	51	1
V37B1 Janitorial Supplies	8	1
V38B1 Patient Care Supplies	7	3
V39B1 Personal Belongings	16	3
Total	323	

*Codes 1) weekly 2) monthly 3) 6-months 4) yearly

Independent Variables

Gender

There are several independent variables in this study. Beginning with gender, the gender variable yielded a 100 percent response rate. The sample consists of 84 percent females and 16 percent males. (See Table 8)

Table 8

Gender of Respondents

(N=133)

V64 Gender	N	Percent
Male	21	15.8
Female	112	84.2
Total	133	100.0

Marital Status

Missing only three cases, the marital status variable consists of mostly married individuals, with 14 percent single persons, 6 percent divorced, 5 percent separated, and 2 percent of an "other" category. (See Table 9)

Table 9

Marital Status of Respondents

(N=130)

V66

Marital Status	N	Percent
Married	93	69.9
Single	18	13.5
Divorced	8	6.0
Separated	5	3.8
Other	6	4.5
Missing	3	2.3
Total	133	100.0

Age

The mean age is 41, the mode is 36, and median is 39. Interestingly enough, this survey group consists of mostly older adults. Needless to say, most (70 percent) of the respondents were over 35 years old. The ages of the total sample ranged from 21-69. (See Table 10)

Table 10
Age Of Respondents
(N=127)

Age	Frequency	Percent
69	2	1.5
67	1	.8
65	1	.8
63	1	.8
64	3	2.3
62	4	3.0
61	1	.8
60	1	.8
59	1	.8
56	1	.8
55	1	.8
52	1	.8
51	1	.8
49	2	1.6
48	4	3.0
47	7	5.3
46	5	3.8
45	5	3.8
44	5	3.8
43	5	3.8
42	2	1.5
41	7	5.3
40	5	3.8
39	6	4.5
38	3	2.3
37	12	9.0
36	6	4.5
35	7	5.3
34	3	2.3
33	3	2.3
32	5	3.8
31	2	1.5
30	5	3.8
29	1	.8
28	2	1.5
27	1	.8
26	3	2.3
25	1	.8
22	1	.8
-9 *missing casses	6	4.5
Total	133	100.0

Mean=42 Median=60 SD=10.32

Ethnic Background

Although this sample was made-up of mostly Caucasian-Americans, there were an equal number of the other ethnic groups represented. Caucasians represented 68 percent of the sample, Blacks 10 percent, Hispanics 9 percent, and Asians 9 percent. As with the age variable, six failed to answer this question. (See Table 11)

Table 11

Ethnicity of Respondents

(N=127)

V67

Ethnicity	N	Percent
Caucasian	90	67.7
Black	13	9.8
Hispanic	12	9.0
Asian	12	9.0
Missing	6	4.5
Total	133	100.0

Occupations

The distribution of occupational groups are more concrete here, since there were only two respondents who did not respond to this question. Although unusual for a hospital with such diverse occupations, this sample consists of mostly professional individuals (64 percent) with the rest of the sample consisting of 20 percent clerical, 5 percent technicians, and 4 percent maintenance personnel. (See Table 12)

Table 12

Occupation of Respondents

(N=131)

V68

Occupation	N	Percent
Maintenance	5	3.8
Clerical	21	15.8
Technical	6	4.5
Clerk	6	4.5
Professional	85	63.9
Other	8	6.0
Missing	2	1.5
Total	133	100.0

Education

Another interesting statistic involves the education variable. Looking at the sample as a whole with only one missing case, 77 percent of the sample have some type of higher education. As many as 55 percent of the sample have either a BA Degree or an AA Degree combined and 9 percent possess a Masters Degree. (See Table 13)

Table 13

Education of Respondents

(N=131)

V69

Education	N	Percent
Some High School	2	1.5
High School	14	10.5
Some College	29	21.8
AA\AS Degree	38	28.6
BA\BS Degree	36	27.1
MA Degree or Higher	13	9.8
Missing	1	.8
Total	133	100.0

Income

For those who reported income, the mean is $55,700 dollars annually, the median is $54,000 and the mode is $60,000. Only 10.8 percent of the sample fell in the $60,000 range and 6.8 percent fell in the $50,000 range. The rest of the sample had more or less an even distribution in each income category ranging from $11,000 to $120,000. It should be noted that income had fifteen cases missing; therefore, this information is based on 118 reported cases. (See Table 14)

Table 14 Income Of Respondents

Income	Frequency	Percent
$11,000	1	.8
$14,000	2	1.5
$15,000	1	1.8
$16,000	4	3.0
$18,000	2	1.5
$20,000	2	1.5
$22,000	2	1.5
$24,000	1	.8
$25,000	1	.8
$26,000	1	.8
$27,000	1	.8
$28,000	1	.8
$30,000	4	3.0
$34,000	1	.8
$35,000	4	3.0
$37,000	2	1.5
$39,000	1	.8
$40,000	6	4.5
$42,000	1	1.8
$43,000	2	1.5
$45,000	4	3.0
$47,000	1	.8
$48,000	1	.8
$50,000	9	6.8
$52,000	1	.8
$53,000	1	.8
$54,000	3	2.3
$55,000	1	.8
$58,000	1	.8
$60,000	14	10.5
$65,000	3	2.3
$66,000	1	.8
$68,000	1	.8
$70,000	8	6.0
$72,000	1	.8
$75,000	3	2.3
$78,000	1	.8
$80,000	6	4.5
$81,000	1	.8
$82,000	1	.8
$85,000	3	2.3
$86,000	1	.8
$88,000	1	.8
$100,000	6	4.5
$110,000	4	3.0
$120,000	1	.8
missing cases -9	15	11.3
Total	133	100.0
(N=118) Mean=55.79	Median=54.00	SD=25.42

It would seem that the years-of-service would be consistent with the income data, meaning the more years-of-service the more income, but such is not the case here. With only three cases missing, the mean is 10 years-of-service, the median is 9 and the mode is 3. Most of the respondents fell between 1 and 10 years-of-service. (See Table 15)

Table 15

Years of Service

(N=130)

Years	Frequency	Percentage
0	2	1.5
1	9	6.8
2	8	6.0
3	15	11.3
4	5	3.8
5	7	5.3
6	1	.8
7	11	8.3
8	5	3.8
9	5	3.8
10	8	6.0
11	5	3.8
12	5	3.8
13	9	6.8
14	4	3.0
15	5	3.8
16	2	1.5
17	4	3.0
18	3	2.3
19	1	.8
20	7	5.3
21	4	3.0
22	1	.8
25	2	1.5
26	1	.8
28	1	.8
34	1	.8
35	1	.8
missing cases -9	3	2.3
Total	133	100.0

Mean=10.07 Median=9.00 SD=7.400

Examination of the Hypotheses

In this study, there are 10 hypothesis which will be tested here. This section begins by discussing the most critical one, the theft problem. Next, it discusses the statistical analysis of the variables in relation to each individual hypothesis.

Hypothesis 1: There will be a theft problem among the two hospitals.

In order to examine Hypothesis One, "theft problem" must be defined. Since research shows one out in ten employees steal (McClintock, 1970), theft activity in this study of more than 10 percent or more by employees in any hospital item will be considered a "theft problem.

Looking exclusively at the percentages of theft in the self-reporting section, out of seventeen variables four items had theft losses of over 10 percent. Specifically, they were uniforms at 12 percent, lotion at 21 percent, medical aid supplies at 36 percent, and kleenex at 26 percent. Frequency of occurrence, for the most part is on a semi-annual basis. (See Table 2)

On a more general basis, according to the theft activity observed by respondents in "other" departments," there are three additional items with theft losses of over 10 percent. Along with hospital uniforms, lotion, medical aid supplies, and kleenex, employees noticed theft losses (by employees generally throughout the hospital), of

linen at 14 percent, clerical supplies at 31 percent, and personal belongings at 23 percent. This is a total of seven items with theft activity between 14-29 percent. Frequency of theft is mostly on a 6-month basis but also on a yearly basis. (See Table 4)

In their own department, employees noticed theft losses for the same set of six items with two others at almost 10 percent. Employees reported theft losses of linen at 9.8 percent, uniforms at 27 percent, lotion at 32 percent, medical aid supplies 44 percent, xerox paper at 9.8 percent, clerical supplies at 46 percent, kleenex at 40 percent, and personal belongings at 12 percent. Theft frequency in this section is committed semi-annually or annually. (See Table 6)

Although the theft rate is not actively high in the more valuable or costly items, both hospitals seem to have a problem with control of smaller hospital property items. The smaller items have the highest theft rates and the larger or more valuable items have less frequent theft rates. Between the departments, theft losses ranged from almost 10-46 percent. Overall, six items had losses well over 10 percent and two of those at almost 10 percent. Therefore, according to the statistics from the self-report section and the observation sections, the hypothesis is accepted and the null hypothesis is rejected. (See Table 16)

Table 16

Theft Loss Percentages

Among Departments and Self-Report

Variable	Other	Own	Self
Linen\Blankets	14%	9.8%	---
Uniforms\Gowns	26%	22%	12%
Lotion	28%	32%	21%
Medical Aid Supplies	27%	44%	36%
Xerox Paper	---	9.8%	---
Clerical Supplies	31%	46%	---
Kleenex Boxes	27%	40%	26%
Personal Belongings	22%	12%	---

Hypothesis 2: Male employees will have a higher rate of theft than female employees.

In order to consider this hypothesis, a theft rate for men must be established. To calculate the theft rate, the following formula is used:

$$\frac{\text{\# of thefts}}{\text{\# of men in sample}} \times 100 = \text{THEFT RATE FOR MEN}$$

According to this formula, the rate is 90 thefts for every 100 male hospital employees. Using the same principle, the theft rate of females is 113 thefts for every 100 female hospital employees. The statistics for the formula were gathered from the self-reporting frequency section (Section 3) of the questionnaire. Men admitted to 19 thefts, with a total of 21 males in the sample. Women admitted to 127 thefts and there are 112 females in the sample. Comparing these statistics, the theft rate of men is not higher, rather lower by 23 percent. In addition, Chi-square did not display any significant difference in male\female theft no\yes responses to these variables. For both males and females, the most frequent theft occurrence was 6-months. The hypothesis is then rejected and the null hypothesis is accepted. (See Tables 17)

Table 17

Chi-Square Values Between Males and Females

Self-Reported Theft

Theft Item	N	Probability*
V43A Linen	133	.461
V44A Typewriters	133	0
V45A TV's	133	0
V46A Uniforms\gowns	133	.700
V47A Small Equipment	133	.537
V48A Surgical Instruments	133	.181
V49A Computers	133	0
V50A Tools	133	0
V51A Lotion	133	.805
V52A Large Equipment	133	0
V53A Medical Aid Supplies	131	.731
V54A Office Supplies	133	.537
V55A Office Furniture	133	0
V56A Kleenex Boxes	131	.160
V57A Janitorial Supplies	133	.537
V58A Pt.Care Supplies	133	.448
V59A Personal Belongings	133	0

*Zero entered due to the lack of cases.

Hypothesis 3: Male employees will admit to theft of a greater monetary value.

According to Section Three frequency scores, men did not commit theft of higher monetary value, rather they committed theft of equal value to the theft of women, but also committed theft of other or more items than the men of this group. Both men and women of the sample committed theft of linen supplies, hospital uniforms\gowns, surgical equipment, hospital lotion, medical aid supplies, and kleenex boxes Women, in addition to these items, committed theft of small hospital equipment, office supplies, and janitorial supplies. As mentioned, there was no significant difference in the chi-square values for these variables. Therefore, the third hypothesis is rejected and the null hypothesis is accepted.

Hypothesis 4: Younger employees will have a higher theft frequency than older employees.

Using Pearson's r correlation coefficient test, one out of the seventeen variables displays significance. Age seemed to play a factor in theft of linen, (V43A). Older employees (ages 27-44) committed more thefts than younger employees. The probability level was .008. Two others had a "tendency" of age playing a factor having the probability level of .068 and .073. Those items being theft of uniforms, kleenex, and such as thermometers and stethoscopes. With only one variable having a significant

probability, it would be incorrect to say that age plays a role in theft. Therefore, the hypothesis is rejected, and the null hypothesis is accepted. (See Table 18)

Table 18

Chi-Square Value For Age Variable

Theft Item	N	Probability*
V43A Linen\Blankets	133	.008
V44A Typewriters	133	0
V45A TV's	133	0
V46A Uniforms\Gowns	133	.068
V47A Small Equipment	133	.396
V48A Surgical Equipment	133	.423
V49A Computers	133	0
V50A Tools	133	0
V51A Lotion	133	.170
V52A Large Equipment	133	0
V53A Medical Aid Supplies	131	.207
V54A Office Supplies	133	.910
V55A Office Supplies	133	0
V56A Kleenex Boxes	131	.073
V57A Janitorial Supplies	133	.252
V58A Patient Care Supplies	133	.715
V59A Personal Belongings	133	0

*Zero entered due to the lack of cases.

Hypothesis 5: Marital status will have a direct effect on theft activity. Those who are not married will have more theft activity than those who are married.

Marital status also displayed no significant difference in theft activity, except in one variable. Theft of small hospital equipment has a Chi-square probability level of .023 (See Table 19). Cross-tabulation of this variable shows two non-married employees admitted to theft of small equipment as opposed to none in the married group, (N=130). This single variable, for the most part, is not an indicator of theft. Therefore, the hypothesis is rejected and the null hypothesis is accepted.

Table 19

Cross-Tabulations For Marital Variable

Theft Item	N	Chi-Sq. Probability*
V43A Linen\Blankets	133	.163
V44A Typewriters	133	0
V45A TV's	133	0
V46A Uniforms\Gowns	133	.791
V47A Small Equipment	133	.023
V48A Surgical Instruments	133	.496
V49A Computers	133	0
V50A Tools	133	0
V51A Lotion	133	.770
V52A Large Equipment	133	0
V53A Medical Aid Supplies	131	.392
V54A Office Supplies	133	.496
V55A Office Furniture	133	0
V56A Kleenex Boxes	131	1.00
V57A Janitorial Supplies	133	.368
V58A Patient Care Supplies	133	.269
V59A Personal Belongings	133	0

*Zero entered due to the lack of cases.

Hypothesis 6: Among the different ethnic groups, some groups will have a higher frequency of theft than others.

Chi-square from cross-tabulations reveals no statistical significance for the ethnic variable as an indicator of theft activity for the self-reporting portion of the questionnaire. None of the seventeen variables were significant (See Table 20). Therefore, the hypothesis is rejected and the null hypothesis is accepted.

Table 20

Cross-Tabulations For Ethnic Variable

Theft Item	N	Chi-Sq. Probability*
V43A Linen\Blankets	133	.720
V44A Typewriters	133	0
V45A TV's	133	0
V46A Uniforms\Gowns	133	.561
V47A Small Equipment	133	.840
V48A Surgical Equipment	133	.840
V49A Computers	133	0
V50A Tools	133	0
V51A Lotion	133	.921
V52A Large Equipment	133	0
V52A Medical Aid Supplies	131	.229
V53A Office Supplies	133	.302
V54A Office Furniture	133	0
V55A Kleenex Boxes	131	.488
V57A Janitorial Supplies	133	.840
V58A Patient Care Supplies	133	.737
V59A Personal Belongings	133	0

*Zero entered due to the lack of cases.

Hypothesis 7: Among the different occupations, some occupations will have a higher frequency of theft than others.

Occupation, as an indicator of theft, expresses significance with only one variable. The variable involves theft of medical aid supplies (V53A), with a probability level of .030 (See Table 21). It includes supplies such as band aids, bandage tape, or gauze. Cross-tabulations disclose professional personnel have the highest level of theft activity. For thefts committed, professional personnel had 39, in contrast to 1 in maintenance, 3 in clerical, 3 in technicians, 1 in clerks, and 1 in an other category, (N=129). As is self evident, professional personnel are more likely to steal medical aid supplies. Remember that the sample consists of mostly professional employees, approximately 65 percent, which would account for the higher number. Having only one variable with significance, the hypothesis is rejected and the null hypothesis is accepted.

Table 21

Cross-Tabulations For Occupation Variable

Theft Item	N	Chi-Sq. Probability*
V43A Linen\Blankets	133	.671
V44A Typewriters	133	.060
V45A TV's	133	0
V46A Uniforms\Gowns	133	0
V47A Small Equipnment	133	.601
V48A Surgical Equipment	133	.954
V49A Computers	133	0
V50A Tools	133	0
V51A Lotion	133	.404
V52A Large Equipment	133	0
V53A Medical Aid Supplies	131	.030
V54A Office Supplies	133	.954
V55A Office Furniture	133	0
V56A Kleenex Boxes	131	.204
V57A Janitorial Supplies	133	.860
V58A Patient Care Supplies	133	.893
V59A Personal Belongings	133	0

*Zero entered due to the lack of cases.

Hypothesis 8: Employees with more education will have lower frequencies of theft than those employees with less education.

The education variable had two significant variables, theft of hospital uniforms (V46A) and theft of medical aid supplies (V53A). Pearson's r correlation coefficient, disclosed probability levels of .047 and .002 (N=132 for V46A; N=130 for V53A). (See Table 22) Cross-tabulation indicated those with a college education (AA\AS) had twice the theft activity as those with less education and those with more education. For theft of hospital uniforms, the frequencies fell as follows: 2 for some college, 9 for an AA\AS Degree, and 5 for BS\BA Degree. For theft of medical aid supplies, the frequencies were as follows: 3 for high school, 5 for some college, 22 for an AS\AS Degree, 13 for BA\BS Degree, and 5 for a Masters Degree or higher. These statistics were actually in the opposite direction of the hypothesis. Obviously, based on these statistics the hypothesis is rejected and the null hypothesis is accepted.

Table 22

Cross-Tabulations For Education Variable

Theft Item	N	Chi-Sq. Probability*
V43A Linen\Blankets	133	.192
V44A Typewriters	133	0
V45A TV's	133	0
V46A Uniforms\Gowns	133	.047
V47A Small Equipment	133	.709
V48A Surigcal Equipment	133	.299
V49A Computers	133	0
V50A Tools	133	0
V51A Lotion	133	.412
V52A Large Equipment	133	0
V53A Medical Aid Supplies	131	.002
V54A Office Supplies	133	.809
V55A Office Furniture	133	0
V56A Kleenex Boxes	131	.323
V57A Janitorial Supplies	133	.809
V58A Patient Care Supplies	133	.571
V59A Personal Belongings	133	0

*Zero entered due to the lack of cases.

Hypothesis 9: Employees with a higher income will have lower frequencies of theft than those with less income.

T-tests for the seventeen variables in Section Three demonstrated no statistical significance in any of the variables. In short, income is not an indicator of theft in this sample. Therefore, the hypothesis is rejected and the null hypothesis is accepted. (See Income T-Test Table 23)

TABLE 23

T-Tests Between Incomes Of
Yes/No Responses

Group 0= No Responses
Group 1= Yes Responses

	N	X	T-Value	P
V43A Linen\Blankets				
Group 0	111	56.10		
Group 1	7	50.85	.53	.598
V44A Typewriters				
Group 0	118	55.79		
Group 1	0	0	0	0
V45A TV's				
Group 0	118	10.07	0	0
Group 1	0	0	0	0
V46A Uniforms\Gowns				
Group 0	104	54.99		
Group 1	14	61.78	-.94	.350
V47A Small Equipment				
Group 0	116	56.06		
Group 1	2	40.00	.89	.378
V48A Surgical Equipment				
Group 0	116	55.77		
Group 1	2	57.00	-.07	.947
V49A Computers				
Group 0	118	55.79		
Group 1	0	0	0	0
V50A Tools				
Group 0	118	55.79		
Group 1	0	0	0	0
V51A Lotion				
Group 0	94	55.05		
Group 1	24	58.70	-.63	.532
V52A Large Equipment				
Group 0	118	55.79		
Group 1	0	0	0	0

(Table continued on next page)

(continued)

	N	X	T-Value	P
V53A Medical Aid Supplies				
Group 0	73	53.49		
Group 1	43	58.69	-1.06	.283
V54A Office Supplies				
Group 0	116	55.66		
Group 1	2	63.50	-.43	.668
V55A Office Furniture				
Group 0	118	55.79		
Group 1	0	0	0	0
V56A Kleenex Boxes				
Group 0	85	56.78		
Group 1	31	52.48	.82	.413
V57A Janitorial Supplies				
Group 0	11	55.67		
Group 1	2	63.00	-.40	.688
V58A Patient Care Supplies				
Group 0	115	55.62		
Group 1	3	62.33	-.45	.654
V59A Personal Belongings				
Group 0	118	55.79		
Group 1	0	0	0	0

Hypothesis 10: Employees with fewer "years-of-service" or less tenure are more likely to engage in theft activity than those with more tenure.

Under T-test analysis, there was one variable with significance, theft of hospitals uniforms or gowns (V46) having a 2-Tail probability of .001. For the rest of the sixteen variables in Section Three, there was no significance. Having only one item with significance is not enough to state that "years-of-service" affects in theft behavior. On the contrary, "years-of-service" is not an indicator of theft. Therefore, the hypothesis is rejected and the null hypothesis is accepted. (See Years-Of-Service T-Test Table 24)

In addition, income and years-of-service T-Tests between male\female for the self-reporting section (V43A-V59A) displayed no significance among the variables. For the seventeen variables, income had a T-Value of .74 with a probability of .463. Although the probability level had a "tendency" toward significance (p=.084), years-of-service showed no significance with a T-Value of -1.74 for all seventeen variables. In short, between males and females, income and years-of-service was not an indicator of theft.

TABLE 24

T-Tests Differences Between Years-Of-Service

Group 0=No Responses
Group 1=Yes Responses

	N	X	T-Value	P
V43A Linen\Blankets				
Group 0	122	10.12		
Group 1	8	9.37	.63	.537
V44A Typewriters				
Group 0	130	10.07		
Group 1	0	0	0	0
V45A TV's				
Group 0	130	10.07		
Group 1	0	0	0	0
V46A Uniforms\Gowns				
Group 0	114	10.58		
Group 1	16	6.43	3.65	.001
V47A Small Equipment				
Group 0	128	9.98		
Group 1	2	16.00	- 1.14	.256
V48A Surgical Equipment				
Group 0	128	10.03		
Group 1	2	13.00	0	0
V49A Computers				
Group 0	130	10.07		
Group 1	0	0	0	0
V50A Tools				
Group 0	130	10.07		
Group 1	0	0	0	0
V51A Lotion				
Group 0	102	10.00		
Group 1	28	10.35	-.23	.822
V52A Large Equipment				
Group 0	130	10.07		
Group 1	0	0	0	0

(Table continued on next page)

(continued)

	N	X	T-Value	P
V53A Mecial Aid Suppliies				
Group 0	80	10.23		
Group 1	48	9.70	.43	.670
V54A Office Supplies				
Group 0	128	10.06		
Group 1	2	11.00	-.18	.860
V55A Office Furniture				
Group 0	130	10.07		
Group 1	0	0	0	0
V56A Kleenex Boxes				
Group 0	94	10.37		
Group 1	34	9.23	.76	.448
V57A Janitorial Boxes				
Group 0	128	10.07		
Group 1	2	10.00	.01	.988
V58A Patient Care Supplies				
Group 0	127	10.13		
Group 1	3	7.66	.57	.570
V59A Personal Belongings				
Group 0	130	10.07		
Group 1	0	0	0	0

Hospital Comparisons

This next discussion will examine the differences, if any, between the two hospitals. Basically, both hospitals contain similar employee composition. Kaiser's consists of 85 percent females and 15 percent males; SBCH consists of 84 percent females and 16 percent males. (See Table 25) Ethnic make-up is also basically the same, with Kaiser having slightly more Caucasian employees (75 percent of sample; SBCH 66 percent of sample), and slightly less of the other minority groups than SBCH. Minority groups consist of almost an even distribution in both hospitals for the remainder of the distribution. (See also Table 25)

Between the two hospitals, cross-tabulations did not express any significant difference between male and female comparisons as well as with ethnic back-ground, marital status, occupation, and education. (See Table 25 page 43-45 for comparisons) Similarly, T-tests between the two hospitals showed no significant difference in age, income or years-of-service. (See Table 26 for T-Tests)

TABLE 25

Comparisons Of Respondent Characteristics

Between Hospitals

Male\Female

	Kaiser Hospital		SBCH	
Male	11	15.3%	10	16.4%
Female	61	84.7%	51	83.6%
	72	100.0	61	100.0

Ethnic Comparison

Caucasian	51	75.0%	39	66.1%
Black	6	8.8%	7	11.9%
Hispanic	5	7.4%	7	11.9%
Asian	4	8.8%	6	10.2%
	68*	100.0%	59	100.0%

*missing cases=6

Table 25 continued

Marital Status Comparison

	Kaiser Hospital		SBCH	
Married	54	78.3%	39	63.9%
Single	6	8.7%	12	19.7%
Divorced	4	5.8%	4	6.6%
Separated	3	4.3%	2	3.3%
Other	2	2.9%	4	6.6%
	68*	100.0	59	100.0

*missing cases=3

Occupational Comparison

Maintenance	3	4.3%	2	3.3%
Clerical Tech	16	22.9%	5	8.2%
Technical	4	5.7%	2	3.3%
Clerk	2	2.9%	4	6.6%
Professional	42	60.0%	43	70.5%
Other	3	4.3%	5	8.2%
	70*	100.0%	61	100.0%

*missing cases=2

Table 25 continued

Educational Comparison

	Kaiser Hospital		SBCH	
High School	8	11.3%	8	13.1%
Some College	17	23.9%	12	19.7%
AA\AS Degree	22	31.0%	16	26.2%
BA\BS Degree	18	25.4%	18	29.5%
Masters Degree or higher	6	8.5%	7	11.5%
	71*	100.0%	61	100.0%

*missing cases=1

Table 26

T-Tests Table Between Kaiser Hospital and SBCH

For Age, Income and Years-of-Service

Group 1 Kaiser Hospital

Group 2 SBCH

Age	N	X	T Value	P
Group 1	67	40.1		
Group 2	60	41.6	-.80	.427

Income	N	X	T-Value	P
Group 1	62	57.8		
Group 2	56	53.5	.91	.365

Years-of-Service	N	X	T Value	P
Group 1	71	11.1		
Group 2	59	8.7	1.84	.068

Comparing the frequency distributions of the theft offenses (Section 2) between the two hospitals, Kaiser Hospital had a higher frequency of thefts than SBCH; 389 as opposed to 243 reported by employees. This is 37 percent higher. Although this may seem like a high

frequency for both hospitals, one should keep in mind that the frequency of theft mostly involves items such as medical aid supplies, office supplies, kleenex, and hospital lotion, observed in the different departments or their own by a percentage of the personnel. The frequency is considerably lower when valuable items are considered. For example, the frequency in this section for theft of an office typewriter is one observed as opposed to thirty thefts observed with hospital uniforms.

Cross-tabulations indicate significance in three items between the two hospitals. Linen supplies (V20A1) has a Chi-square probability value of .022. With this item, the significant difference lies in the area of the type of frequency. Kaiser personnel's frequency distribution scatters among the four selections (weekly, monthly, 6-months, or yearly), while SBCH employees' frequency falls only in the two latter selections. In short, for this variable Kaiser personnel commits theft more often. Theft of kleenex boxes (V36A1) had a Chi-square probability value of .026. Kaiser employees reported 24 thefts by "other" employees, whereas SBCH reported 12 thefts. For this item, Kaiser employees had twice as many admits committed more often than by SBCH employees. For both facilities, the mode was weekly. Janitorial cleaning supplies (V37B1) also demonstrated significance in favor of SBCH with a probability level

of .046. SBCH employees reported five thefts as opposed to three reported by Kaiser employees.

Section Three, the self-reporting of theft, reveals some interesting results. This section is actually more conclusive since the employee recorded his or her own theft activity. In this section also, Kaiser Hospital employees reported a higher frequency of theft than SBCH employees. Among the 17 variables, Kaiser Hospital employees admitted to 99 thefts, whereas SBCH employees admitted to 46 thefts. This is slightly over twice as much than SBCH employees. Some employees admitted to multiple thefts. Thus, employee deviance for Kaiser Hospital is twice that of SBCH. Between the two hospitals two items showed significance, hospital lotion (Chi-square probability value of .000) and kleenex boxes (Chi-square probability value of .035). Kaiser employees admitted to 23 thefts of lotion and SBCH employees admitted to five thefts. The mode was semi-annually. With kleenex boxes, Kaiser employees admitted 24 thefts compared to 11 admitted by SBCH employees. The mode was weekly.

Summary

Most importantly, the statistics show a theft problem among the two hospitals, even though it may be more dominant in the smaller, less valuable items in the hospital. The statistics also show that Kaiser Hospital has a greater theft problem than SBCH, almost twice as

high, according to the frequency scores. "Professional" employees in both hospitals have the highest frequency of theft for only one variable. Depending on the hospital item, theft activity ranges from 1-46 percent. Women have a higher theft rate than men, 23 percent higher. And for the most part, respondent characteristics such as ethnic backgrounds, marital status, incomes and years-of-service are not indicators of theft when introduced to the sample.

SUMMARY AND CONCLUSIONS

Summary of the Problem

Introduction

Theft, in general, continous to be a extensive problem in law enforcement. Specifically, employee theft is a growing condition for many companies and organizations. Losses from employee theft amount to billions of dollars annually. Hospitals, as service organizations, seem to be susceptible to the same crimes of employee pilferage, embezzlement, collusion, and "kickbacks," as other organizations. As research indicates, one out of ten hospital employees commit theft (Mclintock, 1970). Other research studies show as much as 50-75 percent of a hospital's personnel are involved in theft (Tersine, 1981; Zeitlin, 1971). Moreover, theft occurs in practically every department with some departments being more susceptible than others. Employee theft in hospitals is believed to add to the high costs of medical care. However, since there is limited research on theft in hospitals, it is difficult to assess the impact of the phenomenon. Certainly, theft can be a contributing factor.

This research has attempted to create more data where little data exist and simultaneously discover new policies controlling employee theft in hospitals. It has also attempted to identify the extent of employee theft at a local level, specifically, employee theft in two local hospitals. One of the goals of this study was to identify those variables that may be indicators of theft. To focus on those variables, several hypotheses were developed.

Primary data were gathered by distributing a self-administered questionnaire to the employees of two local hospitals. The survey contained questions about employee theft in hospitals which also included a self-report section. It was distributed to 500 hospital employees, 250 from each facility. Out of 500 employees, 133 (28 percent) responded to the survey.

The dependent variables included a perception scale and a list of offenses. The independent variables were gender, marital status, age, ethnic background, occupation, education, income, and years-of-service. To analyze these variables, cross-tabulations, Chi-square, and T-Tests were used.

Analysis and Interpretations

In order to help identify some of the indicators of theft, ten hypotheses were developed. The hypotheses were generated from the research reviewed. Out the ten hypotheses, only one hypothesis was accepted. The primary

purpose of the hypotheses was not only to identify theft indicators, but also to show a relationship between the variables.

Hypothesis One stated that there would be a theft problem among the two hospitals. A theft rate of more than 10 percent in any item was defined as a theft problem. According to the frequency distributions, eight of the variables had a theft rate of 10 percent with some having 20, 30 and 40 percent theft rates. Therefore, Hypothesis One was accepted.

Hypothesis Two stated that male employees would have a higher theft rate than women employees. Analysis of the variables showed the opposite of this. Females not only had a higher rate of theft than men, but also committed more theft of different hospital items. This hypothesis was rejected.

Hypothesis Three predicted that male employees would admit to theft of greater monetary value. The statistics indicated that women not only committed thefts similar to men but in addition committed theft of other hospital items. Women actually committed thefts of greater monetary value. Therefore, Hypothesis Three was rejected.

Hypothesis Four predicted that younger employees would have a higher frequency of theft than older employees. There was only one variable out of the 17 that

showed statistical significance. This was not enough to accept the hypothesis. Generally, age is not an indicator of theft in this sample. Therefore, Hypothesis Four was not accepted.

Hypothesis Five proposed marital status would have a direct effect on theft activity. Those employees who were not married would have a higher theft activity than those who were married. Testing with Chi-square did not disclose any significant association between the variables. Thus, this hypothesis rejected.

Hypothesis Six proposed that among the different ethnic groups, some groups would have a higher theft frequency than others. Chi-square revealed no significant differences among the various types of theft. Therefore, Hypothesis Six was not accepted.

Hypothesis Seven stated among the different occupations, some occupations would have a higher theft frequency than others. Testing nominal and ordinal data with Chi-square, one variable demonstrated significance having a probability level of .03. Professional employees more frequently took medical aide supplies. Having one variable out of 17 showing significance was not sufficient to state that occupation was an indicator of theft. Thus, this hypothesis was rejected.

Hypothesis Eight predicted employees with more education will have less frequency of theft than those

employees with less education. Using Chi-square, two variables displayed significance with probability levels of .047 and .002. However, two hospital items showing significance was still not enough to state that education was an indicator of theft. Therefore, this hypothesis was not accepted.

Hypothesis Nine proposed employees with a higher income would have lower frequencies of theft than those with less income. Using t-tests for this hypothesis disclosed no significance when income was introduced as an indicator to the variables. This hypothesis was not accepted.

Hypothesis Ten stated employees with less "years-of-service" or less tenure would be more likely to engage in theft activity than those with more tenure. One item revealed a significant difference with a probability level of .001. In the other 16 variables, t-tests disclosed no significance for years-of-service as an indicator of theft. Hypothesis Ten was rejected.

In summary, one of the hypothesis was accepted. Hypothesis One confirms a "healthy" theft activity occurring between the two hospitals. Although three of them had one or three variables showing significance, nine hypothesis were rejected.

Generally, most of the respondents for Sections Two and Three did not observe or have knowledge of theft

by employees. Yet, the theft activity reported for "having knowledge" of theft ranged from 1-46 percent with the self-report section having theft activity between 1-31 percent.

Although most of the employees noticed a small amount of theft, the theft loss reported among the combined items was substantial, as Hypothesis One shows. Many of the hospital items had over a 10 percent theft rate with some rates being in the 20, 30, and 40 percentile. Between the two hospitals, Kaiser Hospital had more theft activity reported by employees suggesting that private hospitals may have more theft than public hospitals.

Of the items established as having a theft problem for the self-reported section, the admissions of theft ranged from 12-36 percent. In the study by Hollinger (1988), admissions of theft ranged from 17-41 percent. In his 1983 study, theft admissions by respondents were approximately 33 percent. In the study by Jones (1981), which was done on an extremely small scale (N=34), 85 percent of the respondents admitted to theft. Lastly, of those that answered the question of theft in the study by Hofacre (1979), 48 percent admitted to theft. In relation to the total sample, this percentage would be only 14 percent. Comparing these past studies to the current research, the percentages are approximately the same.

Regarding the perception scale, the respondents do not consider taking hospital lotion, kleenex, or clerical supplies theft of company property. Taking any other hospital item mentioned in the questionnaire; however, is considered "serious" theft by most respondents in this sample.

Implications

According to the frequencies of the offenses reported (1-46 percent), theft is occurring in the two hospitals. Frequencies were higher in the less valuable items and lower in the more valuable ones. The less valuable items had the highest frequencies, but there were many of them. The more valuable items had reported frequencies of 1-9 percent. Although theft of the more valuable items was more infrequent, the combination of the theft activity probably represents a substantial loss to the hospitals. Control measures are definitely needed.

Limitations

This research was limited to the quantity of participating hospitals. Five hospitals would have been preferred for a better comparative analysis. Out of necessity, this research was limited to only two local hospitals. With such a limitation, generalizing from these results to other hospitals is not warranted. However, it is known from this research that theft does exist within these two hospitals with several items having

over a 10 percent theft rate.

Since this researcher focused exclusively on indicators of theft, the research did not explore any other areas. Also, a variety of departments were not included. The research attempted to obtain a general view of theft in hospitals by asking questions regarding theft by other employees. Doing this limited the self-reporting section. It may have been better to have focused the entire questionnaire on the self-reported theft. Perhaps then more information might have been acknowledged about employee theft in hospitals.

Assessment

In analysis, it seems that many of theft problems are due to a lack of controls when in fact theft can be controlled. Although theft may not be totally eliminated, it can certainly be reduced to a minimum loss. Control is the key to much of the theft. How do we gain control? There are many ways. Research, for example, states that a cross referencing system should be installed in all departments ordering and distributing materials. The "golden rule" is never let one person be responsible for the whole function. A "separation of duties" is more appropriate. To give someone full responsibility is to induce opportunity. Separation of duties reduces "opportunity."

Criminal experts state there are four basic reasons

why employees commit theft, opportunity being one of them. The others are need, justification and greed. Opportunity is the most crucial and most controllable condition of theft. Opportunity is created by a lack of workable security over valuable merchandise. Theft occurs when a firm fails to implement controls. Need may be real or imagined, monetary or psychological. Justification is the reason, or reasons, that employees use to rationalize theft behavior. When opportunity, need, and justification are present, theft is likely to occur (Hemphill, 1974). Removing one of these elements, theft is less likely to occur. Other employees commit thefts because they are inherently dishonest people and greed overcomes them (Caudill, 1988). Need is often confused with greed. What most define as need is usually a desire to improve status through greed (Arnold, 1985). Essentially, these people are driven by greed to have more. Other studies relate low-paying positions to greed. One study found that those who earned less were more prone to commit theft (Hollinger, 1979). Another study found those employees in lower status who usually are the lower paid committed more theft (Tucker, 1990).

Other experts state temptation is the basis for much of the theft. Temptation can be eliminated by reducing the opportunity. Control of theft is then achieved. It is ultimately the responsibility of the employer to reduce

temptations. Temptation is also related to low wages. Employees feeling underpaid for some reason or another are more tempted to steal than other employees (Zeitlin, 1971; Tersine, 1981).

Some employees steal because of the low risk of apprehension and punishment. Most companies simply do not prosecute for theft. Another reason employees steal is poor management models. Studies show that 60-80 percent of theft may be due to management or supervision (Hefner, 1986). If management models are themselves corrupt or inefficient, then lower level employees may be merely following higher-level examples.

Other methods to control theft begin with proper screening at the initial hiring stage. Carefully checking employment and credit history of the prospective employees is mandatory. Pre-screening tests, such as written and polygraph tests, are also available to disclose potential dishonest or honest persons. Once hired, management should install controls such as a cross-referencing system followed by routine inspections. Employees should be bonded if their positions could result in embezzlement. Closed circuit television is also an invaluable tool. Exits and entrances should be channelled for better surveillance. In designing hospital facilities, rooms containing valuable hospital property should not be located near stairwells or elevators. Such

property should be located in rooms where hallways offer natural surveillance. Inventories and independent audits should be conducted. These practices not only identify theft but also acts as deterrents. Security guards should be given multiple responsibilities during a shift, such as operating a control gate and monitoring a few television screens. This not only makes the security investment economical, but also keeps the guard alert. Positions of guards should also be rotated to maximize alertness. Equally important, organizations need to have distinct anti-theft policies. Each employee should be notified of the corporate theft policy and the policy should be routinely introduced during orientation or training. To enforce the policy, it should be reiterated throughout the year. Studies show companies with anti-theft policies have lower theft levels than those without (Caudill, 1988).

In summary, perhaps what is in order is an assessment of the existing company structure or policies. Do they create opportunity? Are there "separation of duties?" Is theft induced simply by way of current methods of operation? Is there lack of control? Is the current security system adequate for the facility? In the self-report section of the survey, 54 percent of the respondents considered it "easy" to commit theft within the facility. In the thefts occurred, only 23 percent of of

them were reported to security. And only 12 percent of the thefts reported had follow-up investigations. Therefore, a critical element in theft prevention is the security system and reporting practices. Also, education in theft policy and procedures need to be incorporated when training employees.

Perhaps what is initially needed is reorganization. In reorganizing, control practices can be simultaneously incorporated without extra time and effort. Utilizing these principles, theft can be reduced. Thus, company theft losses are minimized.

Recommendations

Because only two hospitals were available to the study, more research is definitely needed. A study with minimum of 6-10 hospitals might disclose information that could be generalized to other hospitals. Focusing the entire research on the self-reporting of theft behavior could expose valuable information.

Studies show (Hollinger, 1983) that indicators of theft do exist. In this research age, marital status, occupation, and education had a tendency toward being indicators of theft in one to three items. To expose the indicators of theft more conclusively, further research is needed from a different approach with a greater number of personnel.

Theft has simply become a problem too big for service organizations to ignore, especially when it can be controlled. Future research should include more testing of the variables with hospitals from a wider geographic area.

APPENDIX A

HOSPITAL QUESTIONNAIRE

Hospital Questionnaire

This survey contains three sets of similar questions; however, each set of questions involves different circumstances. The first set of questions are to establish your perceptions of the seriousness of certain behavior. The second set of questions regards the hospital in general and the department. The final set of questions pertains to your personal experiences.

The following questions are designed to determine your perceptions of the seriousness of certain acts. You are asked to rate the seriousness of each act with zero being the least serious and ten being the most serious. Using the scale below, answer the question according to how serious you consider the act. (Enter the code number of your answer on the space provided.)

Least Serious — Most Serious
0 1 2 3 4 5 6 7 8 9 10

_____ 1. Taking hospital linen, blankets, or towels.

_____ 2. Taking an office typewriter.

_____ 3. Taking a hospital TV.

_____ 4. Taking hospital uniforms or gowns.

_____ 5. Taking small hospital equipment.

_____ 6. Taking surgical instruments.

_____ 7. Taking a computer terminal.

_____ 8. Taking a hospital carpentry tools.

_____ 9. Taking hospital lotion.

_____ 10. Taking large hospital equipment.

_____ 11. Taking medical aid supplies such as band aids, bandage tape, or gauze.

_____ 12. Taking xerox paper.

_____ 13. Taking hospital paintings or art work.

_____ 14. Taking clerical supplies such as pens, pencils or paper clips.

_____ 15. Taking office supplies like staplers or scissors.

_____ 16. Taking office furniture.

_____ 17. Taking a box of kleenex.

_____ 18. Taking housekeeping or janitorial cleaning supplies.

_____ 19. Taking patient care supplies such as thermometers, tongue depressors, or stethoscope.

Based on your knowledge, answer the following questions regarding employee behavior. Since January 1, 1991, has ANY EMPLOYEE IN YOUR DEPARTMENT done any of the following: (Check the appropriate box.)

20. Taken hospital linen, blankets, or towels?
Any hospital employee not in your department?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

Any employee in your Department?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

21. Taken an office typewriter?
Any hospital employee not in your department?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

Any employee in your department?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

22. Taken a hospital TV?
Any hospital employee not in your department?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

Any employee in your department?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

23. Taken hospital uniforms or gowns?
Any hospital employee not in your department?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

Any employee in your department?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

24. Taken small hospital equipment?
Any hospital employee not in your department?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

Any employee in your department?
[No] [] Yes if yes, in the last
[] week [] month [] 6 months [] Year

25. Taken surgical instruments?
Any hospital employee not in your department?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

Any employee in your department?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

26. Taken a computer terminal?
Any hospital employee not in your department?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

Any employee in your department?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

27. Taken hospital carpentry tools?
Any hospital employee not in your department?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

Any employee in your department
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

28. Taken hospital lotion?
Any hospital employee not in your department?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

Any employee in your department?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

29. Taken large hospital equipment?
Any employee not in your department?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

Any employee in your department?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

30. Taken medical aid supplies such as band aids, bandage tape or gauze?
Any hospital employee not in your department?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

Any employee in your department?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

31. Taken xerox paper?
Any hospital employee not in your department?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

Any employee in your department?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

32. Taken hospital paintings or art work?
Any hospital employee not in your department?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

Any employee in your department?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

33. Taken clerical supplies such as pens, pencils or paper clips?
Any hospital employee not in your department?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

Any employee in your department?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

34. Taken office supplies like staplers or scissors?
Any hospital employee in your department?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

35. Taken office furniture?
Any hospital employee in your department?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

Any employee in your department?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

36. Taken a box of kleenex?
Any hospital employee not in your department?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

Any employee in your department?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

37. Taken housekeeping or janitorial cleaning supplies?
Any hospital employee not in your department?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

Any employee in your department?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

38. Taken patient care supplies such as thermometers, tongue depressors or stethoscopes?
Any hospital employee not in your department?
[] No [] Yes If yes, in the last
[] Week [] Month [] 6 Months [] Year

Any employee in your department?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

39. In any of these thefts, was hospital security notified?
1. No 2. Yes 3. Don't Know

40. Was there any follow-up investigations by hospital security?
1. No 2. Yes 3. Don't Know

41. In your opinion, is the hospital security adequate?

1. No 2. Yes 3. Not Sure

We now want to know your own PERSONAL EXPERIENCES. Have you taken any of the following items? (Please remember, your responses are anonymous--neither the researchers nor anyone else will be able to connect the questionnaire to you. And your questionnaire will be destroyed as soon as the answers are coded into a computer.) (Check the appropriate box.)
Have you:

42. Taken hospital linen, blankets or towels?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

43. Taken an office typewriter?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

44. Taken a hospital TV?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

45. Taken hospital uniforms or gowns?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

46. Taken small hospital equipment?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

47. Taken surgical instruments?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

48. Taken a computer terminal?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

49. Taken hospital carpentry tools?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

50. Taken hospital lotion?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

51. Taken large hospital equipment?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

52. Taken medical aid supplies such as band aids, bandage tape or gauze?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

53. Taken office supplies like staplers or scissors?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

54. Taken office furniture?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

55. Taken a box of kleenex?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

56. Taken housekeeping or janitorial cleaning supplies?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

57. Taken patient care supplies such as thermometers, tongue depressors or stethoscope?
[] No [] Yes if yes, in the last
[] Week [] Month [] 6 Months [] Year

58. How easy was it to take any of the items mentioned?

[] 1. Very easy [] 3. Somewhat difficult

[] 2. Somewhat easy [] 4. Very difficult

59. In any of these thefts was hospital security notified?
1. No 2. Yes 3. Don't Know

60. Were there any follow-up investigations by hospital security?

1. No 2. Yes 3. Don't Know

61. In your opinion, is hospital security adequate?

1. No 2. Yes 3. Not Sure

Basic Information

(Circle number of answer that applies to you)

62. Are you: 1. Male 2. Female

63. Your year of birth _____

64. Marital Status:

1. Married 2. Single 3. Divorced 4. Separated

5. Other

65. Your Ethnic\Racial Background:

1. Caucasian 3. Hispanic 5. Other (Please Specify) _____

2. Black 4. Oriental

66. Your Occupation:

1. Maintenance 3. Technical 5. Professional

2. Clerical 4. Clerk 6. Other_____

67. Education:

1. Some High School 4. AA or AS Degree

2. High Graduate or GED 5. BS or BA

3. Some College 6. Masters Degree or Higher

68. Family Income in the last year_____

69. Your years of service?_____

If you should have any comments about the questionnaire, please enter them here._____

_____

_____

_____

_____

APPENDIX B

LETTERS

Dear Respondent:

This survey is endorsed by the Criminal Justice Department of California State University San Bernardino. The purpose of this survey is to obtain accurate information about certain behavior that occurs within a hospital setting. The information will be used for planning and research purposes only. With your assistance, the goals of this study can be accomplished. We only ask a few minutes of your time to complete this questionnaire. With the cooperation of your Hospital Administration, your name was selected at random from hundreds of other employees. Since only a few questionnaires were mailed, your response represents hundreds of other employees. The questionnaire is completely anonymous and confidential. You, as the respondent, cannot be identified. Most of the questions pertain to your knowledge or personal experiences with certain behavior. In approximately two weeks, you may receive a follow-up letter reminding you to complete the questionnaire. Since the questionnaire is completely anonymous and we do not know who has returned a questionnaire, follow-up may be mailed to all participants. After completion, please return the questionnaire as soon as possible in the self-addressed stamped envelope provided for your convenience. Please remember, your participation is voluntary. Results of the study will be mailed to you upon request. Thank you for your time and cooperation.

Graduate Student
Criminal Justice Department
California-State University
San Bernardino

Dear Respondent:

About two weeks age you should have received a questionnaire from the Criminal Justice Department of Cal-State University San Bernardino. If you have already returned the questionnaire, thank you for your promptness. If you have not returned it as yet, this card is a reminder to complete the questionnaire. Please remember that the questionnaire is completely anonymous. Neither the researcher nor your hospital administration can identity your questionnaire. Furthermore, your hospital administration will never see the returned questionnaires. Thank you for your time and cooperation.

Graduate Student
Criminal Justice Department
California-State University
San Bernardino

BIBLIOGRAPHY

BIBLIOGRAPHY

"A $40-Billion Crime Wave Swamps American Business." 1977. U.S. News and World Reports, 21 February.

Albanese, Jay. 1987. "Organizational Offenders." Niagara Falls, NY: Apocalypse.

Alder, Jerry. 1977. "Employee Thievery: A $6 Billion Hand in the Till." New York Sunday News Magazine, 11 September, p.6.

American Management Associations. 1977. "Summary Overview of the 'State of the Art' Regarding Information Gathering Techniques and Level of Knowledge in Three Areas Concerning Crimes against Business." Draft report, (Washington, D.C.: National Institute of Law Enforcement and Criminal Justice, Law Enforcement Assistance/Administration, (March), pp.17-19.

Anderson, Theodore R. and Seymour Warkov. 1961. "Organizational Size and Functional Complexity: A Study of Administration in Hospital." American Sociological Review 26 (February): 23.

Arnold, Gregory B. 1985. "Employee Theft A $40 Billion Crime." Management World (November): 27-29.

Baker, Michael A. and Alan F. Westin. 1987. "Employer Perceptions Of Workplace Crime." U.S. Department of Justice, Bureau of Justice Statistics, (May).

Benson, Michael L. 1989. "The Influence of Class Position On The Formal and Informal Sanctioning of White-Collar Offenders." The Sociological Quarterly 30 (Fall): 465-479.

Blumstein, Alfred, Jacqueline Cohen, and Richard Rosenfeld. 1991. "Trend And Deviation In Crimes Rates: A Comparison Of UCR and NCS Data For Burglary and Robbery." Criminology 29 (May): 237-263.

California Hospital Association. 1978. "Hospital Fact Book." Third edition, Sacramento, California.

Carlson, Wayne R. 1990. "Crime Prevention through Environmental Design: A Microenvironmental Study of Theft within a Hospital Setting." Security Journal 1: 276-286.

Caudill, Donald W. 1988. "How To Recognize and Deter Employee Theft." Personnel Administration 33 (July): 86-90.

Claybrook, Joan and the staff of Public Citizen. 1984. "Retreat From Safety: Reagan's Attack on America's Safety." New York: Pantheon Books, p.60.

Clinard, Marshall B. and Richard Quinney. 1973. "Criminal Behavior Systems." Second edition, New York: Holt, Rinehart and Winston.

Clinard, Marshall B. and Peter C. Yeayer. 1980. "Corporate Crime." New York: The Free Press.

Coe, Rodney M. 1970. "Sociology of Medicine." Second Edition, McGraw-Hill Book Company Inc., New York.

Cohen, Mark. 1988. "Some New Evidence On The Seriousness Of Crime." Criminology 26 (May): 343-353.

Cole, Alvin G. 1968. "Employee Dishonesty." Hospital Financial Management 22 (February): 25.

Cullen, Francis T., William J. Maakestad, and Gray Cavender. 1987. "Corporate Crime Under Attack." Cincinnati, Ohio: Anderson Publishing Company.

Cressy, Donald. 1953. "Other People's Money: A Study In The Social Psychology of Embezzlement." Glencoe, IL: Free Press.

"Crime in Business: Stop Employee Theft, It's Money Down The Drain." 1976. Canadian Business 49: 12, 14, 16.

Currie, Elliott. 1985. "Confronting Crime." Pantheon Books New York.
1991. "Crime In The Market Society." Dissent 38 (Spring): 254-259.

Cutshall, Charles R., and Kenneth Adams. "Responding to Older Offenders: Age Selectivity in The Processing of Shoplifters." 1983. Criminal Justice Review 8 (Fall): 1-8.

Daly, Kathleen. 1989. "Gender and Varieties of White-Collar Crime." Criminology 27 (Fall): 769-793.

Douglas, Jack D., and John M. Johnson (eds). 1977. "Official Deviance: Readings in Malfeasance, Misfeasance, and Other Forms of Corruption." Philadelphia: J.B. Lippincott.

Ermann, M. David and Richard Lundman (eds). 1978. "Corporate and Governmental Deviance: Problems of Organizational Behavior in Contemporary Society." New York: Oxford.

Gilmore, Carol B. 1982. "To Catch a Corporate Thief." Society for Advancement of Management's Advance Management Journal, XLVII (Winter): 35-39.

Green, Gary. 1990. "The Occupational Crime." Chicago IL., Nelson-Hall.

Harries, Keith D. 1990. "Serious Violence," Charles C. Thomas Publisher, Springfield, Illnois, U.S.A.

Hefter, Richard. "The Crippling Crime." 1986. Security World (March): 36-38.

Hemphill, Charles F. 1974. "The Domino Theory Of Employee Theft." Administrative Management 35 (March): 78-79.

Heydebrand, Wolf. 1973. "Hospital Bureaucracy." Dunellen Publishing Company: New YorK.

Hochstedler, Ellen. 1984. "Corporations As Criminals." Sage Publications, Inc.

Hofacre, Susan Kay. 1979. "Employee Theft in Hospitals: An Exploration Study of Victimization and Occupational Crime." Dissertation, University of Riverside, Ph.D.

Hollinger, Richard Clifton. 1979. Employee Deviance: Acts Against The Formal Work Organization." Dissertation, University of Minnesota, Ph.D.
1986. "Acts Against The Workplace: Social Bonding And Employee Deviance." Deviant Behavior 7:53-75.

Hollinger, Richard C. and John P. Clark. 1982. "Formal and Informal Social Controls of Employee Deviance." The Sociological Quarterly 23 (Summer): 333-343.

1983. "Deterrence In The Workplace: Perceived Certainty, Perceived Severity, and Employee Theft." Social Forces, 62 (December): 398-418.
1983. "Theft By Employees." Lexington, MA: Lexington Books.

Horning, Donald M. 1979. "Blue Collar Theft: Conceptions of Property Attitudes Toward Pilfering and Work Group Norms in a Modern Industrial Plant." In Erwin Smigel and H. Lawrence Ross (eds.), "Crime Against Bureaucracy," New York: Van Nostrand Reinhold.

Jaspan, Norman. 1974. "Mind Your Own Business." Englewood Cliffs, NJ: Prentice-Hall.
1988. "Total Approach to Loss Prevention." Top Health Care Finance 15 (Winter): 62-67.

Jones, John W. 1981. "Attitudinal Correlated of Employee Theft of Drugs and Hospital Supplies Among Nursing Personnel." Nursing Research 30 (November/December): 349-351.

Kantor, Seth. 1983. "How to foil Employee Crime." Nations's Business, (July): 36-38.

Kilgo, Stephen C. 1989. "A Theft Control Approach." Security Management 33 (April): 81-83.

Lipman, Mark. 1973. "Stealing: How America's Employees Are Stealing Their Companies Blind." New York: Harper's Magazine Press.

Lydon, Kerrigan. 1984. "Employee Theft: A Costly Fringe Benefit." Security World (April): 27-31.

MaCaghy, Charles H. 1976. "Deviant Behavior: Crime, Conflict, and Interest Group." New York: MacMillon, p.178.

May, Edgar. 1980. "White Collar Crime : Arrest By Appointment." Police Magazine 3 (March): 27-36.

Morse, George P. and Robert F. Morse. 1971. "Protecting the Health Care Facility." The Williams and Wilkens Company: Baltimore, Maryland.

Nagel, Walter. 1988. "Specific Areas Of Risk." Top Health Care Finance 15 (Winter): 22-45.
1988. "Security." Top Health Care Finance, 15 (Winter): 55-61.
1988. "Summary of Recommendations." Top Health Care Finance 15 (Winter): 75-80.

Padilla, Peter F., Richard C., Hollinger, and John P. Clark. 1988. "Organizational Control Of Deviant Behavior: The Case Of Employee Theft." Social Science Quarterly, 69 (March/June): 261-280.

Palmer, Robert. 1971. "How North Memorial Hospital Solves Their 12 Major Security Problems." Modern Hospital (December): 65-67.

Pauly, David, Marilyn Archiron, Daniel Shapiro, Hally Morris and Betsy Rubiner. 1983. "Stealing From The Boss." Newsweek, 20 December, 78

Scott, Donald W. 1989. "Policing Corporate Collusion." Criminology 27 (March): 559-587.

Simon, David R. and D. Stanley Eitzen. 1982. "Elite Deviance." Boston: Allyn and Bacon.

Smigel, Erwin O. and Ross H. Lawrence. 1970. "Crimes Against Bureaucracy." Litton Educational Publishing Inc., Van Nostrand Reinhold Company,

Smith, Robert A. 1981. "A Systems Approach To Loss Prevention In Hospitals." Journal of Security Administration 4:23-51.

Sosnowski, Daniel E. 1985. "Curbing Employee Theft How Firms Do It." Security Management 29 (September): 109-112.

Sutherland, Edwin H. 1949. "White Collar Crime." New York: Holt, Rinehart and Winston.

Tersine, Richard J. and Roberta Russell. 1981. "Internal Theft: The Multi-Billion Dollar Disappearing Act." Business Horizons 24 (November/December): 11-20.

Tucker, James. 1989. "Employee Theft As Social Control." Deviant Behavior 10: 319-334.